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Cover: Maryland's first Snowy Plover, *Charadrius nivosus*. Hart-Miller Island, Baltimore County, Maryland, 4 May 2015 (photographed by Jeff Culler).

Maryland Birdlife 65(1):1

EDITOR'S NOTE

Farewell to Mike Welch
Maryland Birdlife bids a fond farewell to Mike Welch, the Statewide May Count Compiler. Mike has done a fabulous job during my few editorial years. This issue contains Mike's last May Count report. Mike and Donna will be leaving Maryland and relocating to Oro Valley, Arizona, just north of Tucson. We wish them both a wealth of great birds in Arizona!

Statewide May Count Compiler
A Frederick Bird Club member has expressed an interest in becoming the new Statewide May Count Compiler. We hope to introduce the new compiler to you in an upcoming issue.

Statewide Mid-Winter Count Compiler
A Baltimore Bird Club member has expressed an interest in becoming the new Statewide Mid-Winter Count Compiler. We hope to introduce the new compiler to you in an upcoming issue.

MOS Bird Artists
We have heard from three MOS bird artists that were interested in having their artwork shown in *Maryland Birdlife*. Their works would appear at the end of an article where there was a large amount of white space at the end of its last page. Rather than leaving the space blank, we would feature examples of their artwork. The artwork would be printed in black-and-white and would generally pertain to the bird species of its preceding article. If you might be interested in participating in this endeavor, please contact me.

This issue features artwork submitted by our first artist respondent, Ellen Lawler. Ellen is Professor Emeritus in the Department of Biological Sciences at Salisbury University. Her academic specialties were pathophysiology, ornithology, vertebrate biology, and biological drawing and illustration. Ellen is currently the Vice President of the Tri-County Bird Club. In addition to having more time to birdwatch and paint due to retirement, Ellen is now volunteering at the Ward Museum of Wildfowl Art and the Art Institute and Gallery, both in Salisbury.

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Maryland Birdlife 65(1):2-9

Fall Migration of Sharp-shinned Hawks (*Accipiter striatus*), Broad-winged Hawks (*Buteo platypterus*), and Red-tailed Hawks (*Buteo jamaicensis*) at Washington Monument State Park, Washington County, Maryland

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Abstract: The Washington Monument State Park hawk watch site, situated on one of the easternmost ridges of the Appalachian Mountains, is one of the more important autumn raptor migration sites in Maryland since it is located along a major raptor migration lead line. Using twelve years of data (2003–2014) from a three-month period, September through November, this paper seeks to establish the best dates for observing hawks at the site based on three target species: Sharp-shinned Hawk (*Accipiter striatus*), Broad-winged Hawk (*Buteo platypterus*), and Red-tailed Hawk (*Buteo jamaicensis*). Since observation periods varied from day to day, the number of hawks of a given species for each day was normalized to the number of hawks seen per hour for each day. In order to determine the best observation dates, I evaluated the data points in five-day intervals from 1 September to 29 November. The best dates to observe hawks were: Sharp-shinned Hawks, 26 September through 20 October (average 4.1-6.6 hawks per hour); Broad-winged Hawks, 11 September through 30 September (average 9.7-39.0 hawks per hour); and Red-tailed Hawks, 26 October through 9 November (average 5.4-9.3 hawks per hour). Expected peak dates for each species would be: Sharp-shinned Hawk, 18 October; Broad-winged Hawk, 19 September; and Red-tailed Hawk, 3 November. It was found that the peak dates tend to lag behind those at Hawk Mountain in Kempton, Pennsylvania for Broad-winged and Red-tailed Hawks by about two days and for Sharp-shinned Hawks by about eleven days.

INTRODUCTION

The Washington Monument State Park count site, located atop the monument dedicated to George Washington (N 39°32'48.79", W 77°36'35.75" [HMANA 2014a]) near Boonsboro, Maryland, is a great place for observing migrating hawks in autumn (Figures 1 and 2). It is situated on South Mountain along the Appalachian Trail and along one of the major raptor migration lead lines on the east side of the Appalachian Mountains following the ridges below Kittatinny Ridge in Pennsylvania.

Figure 1. Washington Monument. Washington Monument State Park, Washington County, Maryland, 8 November 2014.

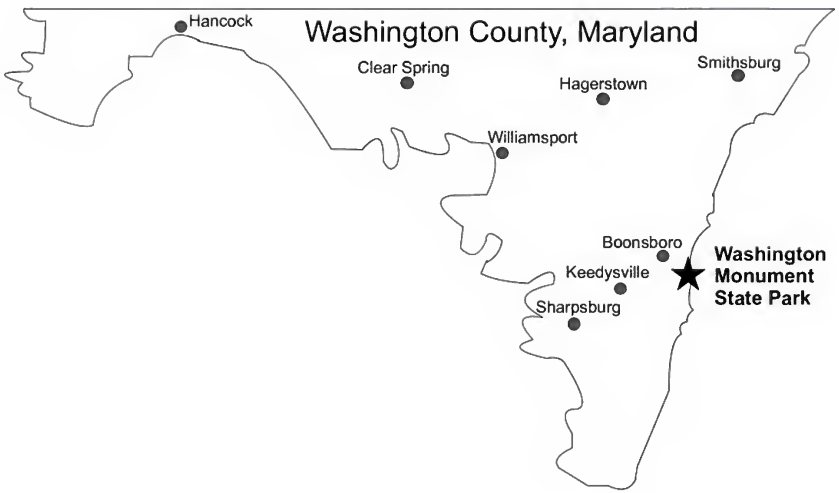

Figure 2. Washington Monument State Park. Washington County, Maryland.

One fall day many years ago, I noticed hawks moving south past Washington Monument atop South Mountain. When I mentioned this to Park Superintendent Marshall Moats, he replied, "We were putting a new roof on my station here in the park one afternoon when Broad-winged Hawks started to soar over us. We lay on our backs on the roof and counted over 4,000. We see some of the same hawks here that they see at Hawk Mountain [but] two or three days later."

Using twelve years of data gathered at Washington Monument, this paper seeks to answer two questions. First, since time is precious to most of us, what are the best days to observe migrating hawks at the Washington Monument count site, and second, does the hawk migration at Washington Monument tend to lag behind that of Hawk Mountain in Kempton, Pennsylvania?

Autumn migration schedules are numerous in the form of charts and graphs. They are mostly diagrams with various-sized columns, dots, or lines, without any numbers as a frame of reference (Connor 1988, Brett 1991, Liguori 2005, and HMANA 2014a), except for the chart on Broad-winged Hawks in *The Birds of North America Online* (Goodrich et al. 2014). To work out my own schedules, I turned to the Hawk Migration Association of North America (HMANA) website, HawkCount.org, to obtain data on the daily observations at Washington Monument State Park (HMANA 2014b). From these data, I investigated the peak days for migration over a three-month period over twelve years for the three target species, Sharp-shinned Hawk (*Accipiter striatus*), Broad-winged Hawk (*Buteo platypterus*), and Red-tailed Hawk (*Buteo jamaicensis*).

METHODS

I reviewed daily data collected from 1 September through 29 November from 2003 through 2014 (12 years) on the HMANA (2014b) website for Washington Monument (Table 1). This web page is sponsored by the Washington County Bird Club, and the official counter has been J. Paul Newton. Except for Sharp-shinned Hawk, Broad-winged Hawk, and Red-tailed Hawk, and perhaps Cooper's Hawk (*Accipiter cooperii*), the data for most raptor species seemed to be scattered and had no discernible pattern. Therefore, the first three species became the objective for this effort. The data points for Cooper's Hawk seemed to track and lag those of Sharp-shinned Hawk. A total of 484 data points for Broad-winged Hawk, 788 data points for Sharp-shinned Hawk, and 801 data points for Red-tailed hawk were reviewed for this paper. The analysis of these data suggests the best range of dates for observing the hawk migration for these target species.

Table 1. Records of Broad-winged, Sharp-shinned, and Red-tailed Hawks by year and month at Washington Monument State Park, 2003-2014. A "record" refers to a one-day observation period.

Species and Year	September	October	November	Three-month Total
Sharp-shinned Hawk (SSHA)				
2003	25	24	18	
2004	19	18	14	
2005	27	20	18	
2006	24	26	15	
2007	24	27	23	
2008	24	28	21	
2009	28	23	18	
2010	25	29	18	
2011	23	24	16	
2012	25	26	14	
2013	27	25	17	
2014	25	26	4	
SSHA Monthly Subtotal	296	296	196	788
Broad-winged Hawk (BWHA)				
2003	25	15	——	
2004	19	14	——	
2005	27	11	——	
2006	24	15	——	
2007	24	18	——	
2008	24	18	——	
2009	28	15	——	
2010	25	18	——	
2011	23	15	——	
2012	25	18	——	
2013	27	16	——	
2014	25	15	——	
BWHA Monthly Subtotal	296	188	——	484
Red-tailed Hawk (RTHA)				
2003	25	24	18	
2004	19	18	14	
2005	27	20	18	
2006	24	26	15	
2007	24	27	24	
2008	24	28	21	
2009	28	23	19	
2010	25	29	18	
2011	23	24	16	
2012	25	26	14	
2013	27	25	17	
2014	25	26	15	
RTHA Monthly Subtotal	296	296	209	801
Monthly Total	**888**	**780**	**405**	**2073**

Since daily observation periods varied in length from day to day, I normalized the number of hawks seen each day for each species from the HMANA tables into the number of hawks seen per hour for each given day. In order to determine the best observation dates, I evaluated the data by simply dividing the overall time frame into five-day intervals—1-5 September, 6-10 September … 20-24 November, 25-29 November. I summed the available data collected for each species during these periods and found the average number of hawks seen per hour for each five-day interval. Unlike other charts referenced previously, I used a five-day interval as the optimal period to balance days with available count data with the relative precision needed to make useful comparisons.

In reviewing the data, I used 90% confidence intervals to discriminate interval count data because the data were collected in an informal manner at the Washington Monument site as compared to Hawk Mountain and other sites. By informal manner, it is meant that there was no consistent daily time period and some days went unreported. Several of the daily time intervals were excluded when the 90% criterion was used.

To determine the peak migration date for each of the three species, I summed species account data for each day across the twelve years and took the highest daily sum.

RESULTS

Table 2 shows the average number of hawks observed per hour in five-day intervals for Sharp-shinned, Broad-winged, and Red-tailed Hawks.

Based on this analysis, recommendations for the best dates to visit the Washington Monument hawk-watch site could be proposed. Table 3 shows the projected peak migration dates and peak day based on species occurrences expected to exceed more than three per hour. Although four of the daily time intervals exceeded the "three per hour" criterion (Table 2: SSHA, 21-25 October; RTHA, 21-25 October, 10-14 November, 15-19 November), they were excluded when the 90% criterion was used.

DISCUSSION

Local weather plays an important role in determining the best dates to observe hawks at Washington Monument, especially with regard to the passage of a cold front accompanied by two or three days of northerly and westerly winds. The day after a cold front passes is quite often the best day to see large numbers of migrating hawks. However, as a few data points show, Broad-winged Hawks may defy expectations and show up in numbers on an east-southeast wind (e.g.,

19 September 2011: 3,410 tallied; and 25 September 2011: 1,410 tallied) (HMANA 2014b).

Table 2. Hawks Observed Passing the Washington Monument. Average number observed per hour per five-day interval.

Five-Day Interval	SSHA: Mean Individuals/Hour	BWHA: Mean Individuals/Hour	RTHA: Mean Individuals/Hour
01-05 September	0.2	0.9	0.2
06-10 September	0.6	2.6	0.1
11-15 September	1.1	17.2	0.2
16-20 September	2.0	39.0	0.2
21-25 September	2.7	22.8	0.2
26-30 September	4.1	9.7	0.3
01-05 October	4.1	0.4	0.4
06-10 October	5.1	0.1	0.6
11-15 October	5.5	0.0	1.2
16-20 October	6.6		2.2
21-25 October	3.6		3.6
26-30 October	2.3		6.9
31 October-04 November	1.0		9.3
05-09 November	0.3		5.4
10-14 November	0.2		4.1
15-19 November	0.1		4.8
20-24 November	0.1		3.0
25-29 November	0.0		1.5

Table 3. Peak migration dates and projected peak observational days at Washington Monument.

Species	Peak Migration Dates	Projected Peak Day
Sharp-shinned Hawk	26 September – 20 October	18 October
Broad-winged Hawk	11 September – 30 September	19 September
Red-tailed Hawk	26 October – 9 November	3 November

As mentioned earlier, the park superintendent once commented that birds appear at Washington Monument two or three days after passing Hawk Mountain. Was he right? According to Pete Dunne, the "magic date" for viewing Broad-winged Hawks at Hawk Mountain is 17 September (Dunne et al. 2012). Goodrich et al. (2014) also notes that the peak period at Hawk Mountain is from 15 to 18 September. The records reviewed for this report show the best day at the Washington Monument is 19 September, two days later than at Hawk Mountain.

According to Bildstein and Meyer (2000), the best day to observe Sharp-shinned Hawks at Hawk Mountain is on 7 October, as they report two-thirds have passed by 12 October. The best day at Washington Monument seems to be 18 October with the best daily interval from 16 to 20 October, after which the numbers seem to drop off very rapidly. I would not expect major flights of Sharp-shinned Hawks at Washington Monument to follow close upon those reported at Hawk Mountain because the migration of Sharp-shinned Hawks is not as concentrated as that of Broad-winged Hawks.

Compared to Broad-winged and Sharp-shinned Hawks, the fall migration of Red-tailed Hawks is more protracted over time, spanning from early September to late November at Washington Monument. The closest thing I could find for a peak migration date at Hawk Mountain was that the mid-point for Red-tailed Hawk migration is 1 November (Hawk Mountain 2015, data not shown). While at Washington Monument the best day is 3 November, based on averages, with the best period from 31 October to 4 November. Comparing migration at Washington Monument with Hawk Mountain for Red-tailed Hawks may be a poor relationship due to the protracted period of migration.

I could not find a correlation between the time of day and the numbers of passing hawks at Washington Monument. Broad-winged Hawks can appear in large numbers in the morning, at mid-day, or in the afternoon. I have found Sharp-shinned Hawks early in the morning at Washington Monument, but their numbers seem to taper off in the late afternoon. Red-tailed Hawks tended to appear in the warmest part of the day. From my experience, Red-tailed Hawks tend to follow the ridge in the cool mornings and then move away from it to drift southward in thermals as the air temperature warms.

ACKNOWLEDGMENTS

I would like to thank J. Paul Newton (official Counter, Washington Monument State Park Hawk Watch Site), members of the Washington County Bird Club, and other volunteers that provided many dedicated hours over the years making the daily observations that I utilized. I thank Janet Millenson for assistance with conversion of the Washington County map. I also thank Mark S. Johnson (Associate Editor), Eugene J. Scarpulla (Editor), and two anonymous reviewers for their suggestions that helped improve this paper.

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Maryland Birdlife 65(1):10-15

Maryland's First Record of Snowy Plover, *Charadrius nivosus*

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On 4 May 2015, we discovered an adult male Snowy Plover (*Charadrius nivosus*) in alternate plumage on Hart-Miller Island, Baltimore County, Maryland. We first noticed a pale plover very close to us but it flew and dropped down on the far side of a dike and was not visible. Graff followed it and described the location where it dropped. At this point, we thought that we may have a Piping Plover (*Charadrius melodus*). We focused our scopes on the area which Graff described and the bird walked up from the far side of the berm. We noticed dark legs and a thin dark bill. We all got very excited and started calling out the field marks. Someone mentioned the dark patch behind the eye. By this time, Culler and Hanfman were taking many photos of the bird (Maryland Biodiversity Project 2015; Figure 1). Ringler got out Graff's Crossley (2011) guide and we reviewed the field marks. We also consulted the Sibley (2011) application from our cell phone. All four of the observers contributed to the shorebird's identification. It was a pale-backed small plover; dark legs; small narrow black bill; black patches on the sides of the neck; black behind the eyes; small black patch on top of the head; white throat, belly, and under rump. The black crown patch, ear coverts, and foreneck patches indicated a male (Page et al. 2009). A brief flight showed a bold white wing stripe, gray back, and white on the sides of its tail with a black tip. We eliminated Piping Plover by its dark legs and dark bill. Although there are currently no North American records, we also eliminated Kentish Plover (*Charadrius alexandrinus*) of Eurasia since our bird was very gray above, did not appear to be especially long-legged, and was a male that lacked a brown head and nape, nor a breeding plumage cinnamon crown (Page et al. 2009).

The Snowy Plover was observed on 4 May and 6-8 May 2015. A total of 43 birders were able to observe it.

Figure 1. Snowy Plover, *Charadrius nivosus*. Hart-Miller Island, Baltimore County, Maryland, 4 May 2015 (photographed by Jeff Culler).

NORMAL RANGE

Snowy Plover is found from the Gulf Coast of Florida to coastal Alabama, Mississippi, Texas and down to the Yucatan peninsula, and from Baja California, north to California, Oregon, and Washington. Inland populations are found in Arizona, New Mexico, Nevada, Utah, Colorado, and Kansas (eBird 2015). All states west of the Mississippi River have had sightings of Snowy Plover. We made the assumption that our Snowy Plover was the Gulf Coast/Florida race since its back was gray, unlike the browner back of the Pacific Coast/Great Basin race (Page et al. 2009).

NORTHEAST AND ATLANTIC COAST RECORDS

Snowy Plover is very rare in the northeastern states (Table 1). Along the Atlantic Coast there have been sightings in Georgia, South Carolina, North Carolina, Virginia, Connecticut, and Massachusetts (Table 1), and in Nova Scotia, Canada (Kingburg Beach, September 2010; NSBS 2015). Table 1 shows the state-bird-records-committee-accepted records for Snowy Plover north of

Florida. In Florida, Snowy Plovers are a non-review species (FOSRC 2013); they breed on the Gulf Coast and also are observed on the Atlantic Coast. Non-records-committee-accepted reports are not included in the list.

Table 1. State-bird-records-committee-accepted records of Snowy Plover for the Northeast and Atlantic Coast states north of Florida (listed north to south).

State	Date	Location	Citation
Maine	(no records)	(no records)	MBRC 2015
Vermont	(no records)	(no records)	VBRC 2014
New Hampshire	(no records)	(no records)	NHRBC 2010
Massachusetts	11, 21, 23 JUN-10 JUL 1994,	Chatham, Mashpee, Yarmouth, Barnstable Co.	MARC 2013
Rhode Island	(no records)	(no records)	RIARC 2015
Connecticut	1 OCT-7 NOV 2004	Sandy Point, West Haven, New Haven Co.	ARCC 2015
New York	(no records)	(no records)	NYSARC 2015
Pennsylvania (eastern only)	29 JUN 1986	The Pinnacle, Berks Co.	PORC 2015
New Jersey	(no records)	(no records)	NJBRC 2015
Maryland/DC	4, 6-8 MAY 2015	Hart-Miller Island, Baltimore Co.	submitted to MD/DCRC
Delaware	(no records)	(no records)	DBRC 2013
West Virginia	(no records)	(no records)	WVBRC 2015
Virginia	19-25 JUN 1995	Cedar Island, Accomack Co.	VARCOM 2014
North Carolina	30 APR-3 MAY 1994	New Drum Inlet, Carteret Co.	CBCBRC 2014
North Carolina	late MAY 2006	Cape Hatteras point, Dare Co.	CBCBRC 2014
North Carolina	7 APR 2007	Wrightsville Beach, New Hanover Co.	CBCBRC 2014
North Carolina	17 SEP 2008	Ocracoke Inlet spit, Hyde Co.	CBCBRC 2014
North Carolina	22 SEP 2008	Bear Island, Hammocks Beach SP, Onslow Co.	CBCBRC 2014
North Carolina	18 FEB 2013	Hammocks Beach SP, nr. Swansboro, Onslow Co.	CBCBRC 2014
North Carolina	3 SEP 2013	North Topsail Beach, Onslow Co	CBCBRC 2014
South Carolina	winter 1992	North Island, Georgetown Co.	CBCBRC 2014
South Carolina	27 FEB-20 MAR 2009	Kiawah Island, Charleston Co.	CBCBRC 2014
South Carolina	15 DEC 2009-27 JAN 2010	Kiawah Island, Charleston Co.	CBCBRC 2014
South Carolina	10 AUG 2010	Kiawah Island, Charleston Co.	CBCBRC 2014
Georgia	29 DEC 2007	Jekyll Island, Glynn Co.	GCRC 2014
Georgia	2 DEC 2010	Jekyll Island, Glynn Co.	GCRC 2014
Florida		(breeds on Gulf Coast; non review)	FOSRC 2013

Records have occurred in every month, with May, June, September, and December each having three records. Winter records occurred primarily in South Carolina and Georgia. The earliest accepted record occurred in 1986.

Looking at the decades, one record occurred in the 1980s, four in the 1990s, eight in the 2000s, and six, so far, in the 2010s.

Other 2015 reported sightings (not officially accepted records) occurred on Little Tybee Island, Chatham County, Georgia (15-16 January), and Mason Inlet Waterbird Management Area (1-5 June) and Figure Eight Island-South End (8-9 June), both New Hanover County, North Carolina (eBird 2015).

In 2009, 39 birders across Maryland participated in Maryland's Next 10 Bird Species (Hafner and Hubick 2009). Snowy Plover came in as the 28th next expected species, as voted by the Maryland birders. Maybe Snowy Plover should have gotten a greater consideration. There are currently 448 species on the Official List of the Birds of Maryland (MD/DCRC 2015), and if accepted by the Maryland/District of Columbia Records Committee, this would be a new addition to that list.

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Chimney Swift (*Chaetura pelagica*) South Transient Roost Staging and Timing on the Central Chesapeake Bay Coastal Plain

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ABSTRACT: For south transient Chimney Swifts (*Chaetura pelagica*), I define the dates for extreme arrival and departure, and mean period of peak abundance at sundown staging roost chimneys in the town of St. Michaels, Maryland, and morning migrants passing overhead along the east side of Chesapeake Bay at Tilghman Island, Maryland, 16 km (10 mi) southwest, during August-October 1969-2014. Additionally, staging roost behavior is noted at the former location. Transient staging at roost chimneys was first detected on 7 August and overhead on 19 August, while staging was last observed on 18 October and the last overhead transient seen on 21 October. The date of mean peak abundance was 23 September for staging swifts and 13 September for overhead transients. The date of mean peak abundance for transient numbers coincides closely with occurrence of the autumnal equinox suggesting this celestial event may be an important indicator in timing of south transient Chimney Swifts. Transient timing and staging behavior at roost chimneys in this study did not appear to differ appreciably from that noted in the literature.

Keywords: *Chaetura pelagica*, Chesapeake Bay Coastal Plain, Chimney Swift, south transient, sundown staging, transient timing.

The small size, shadow-coloring, aerial existence, and high-flying, fast erratic flight of the Chimney Swift (*Chaetura pelagica*) attract little attention at the terrestrial level. An exception may be during their south transient movements when hundreds or thousands may converge at dusk on a single urban chimney for overnight communal roosting (Figure 1). This spectacle is well publicized, attracting considerable historic bird banding attention that has provided us much of what we know about the staging behavior, and migratory timing and pathways of the species.

Nesting swifts and their progeny begin south transient activity by forming communal staging roosts in their village, town, or metropolitan neighborhoods once seasonal nesting and/or fledging is completed (Groskin 1945, Michael and Chao 1973, Hess et al. 2000). Initially, flock sizes in staging roosts vary in proportion to the number of existing chimneys in the immediate area and/or their

Figure 1. Approximately 4000 Chimney Swifts converging at dusk on an urban chimney for overnight communal roosting. Free State Bookbinders, 3110 Elm Avenue, Hampden, Baltimore, Maryland, 10 September 2003, 6:40 p.m. (photographed by Bill Hubick).

suitability for roosting, i.e., residential villages and towns may have up to a few hundred swifts (Burns 1899, Peters 1937, Michael and Chao 1973, Zammuto and Franks 1981) while thousands may gather in metropolitan areas with more and larger chimneys (Pickens 1935, Peters 1937, Coffey 1938, Green 1940, Lowery 1943, Groskin 1945, Bowman 1952). Diurnal transients stop at these convenient roost sites each evening (Calhoun 1938, Calhoun and Dickinson 1942, Kyle and Kyle 2005) where they may remain for days or weeks (Green 1940). Peters (1937) and Calhoun (1938) found that all swifts in a staging roost flock did not depart together in a body as might be expected. Thus, portions of the roost flock may depart south on days with cooler ambient temperatures and gentle northwest breezes, while soon being replaced in the staging roost site by other transient swifts from more northerly locations (Calhoun and Dickinson 1942, Lowery 1943). Hence, once a roosting chimney is established it tends to be consistently occupied for the duration of that season by transients of changing composition (Calhoun 1938, Zammuto and Franks 1979). Roost flock size may remain somewhat constant, but will exhibit days of increased or decreased numbers that reflect transient activity (Burns 1899, Coffey 1936, Groskin 1945, Michael and Chao 1973). Studies have shown 70% of the swifts entered the roosting chimney 20.7 minutes (±2.4 minutes SD) after official sunset when light intensities ranged 0-2 foot candles (Zammuto and Franks 1981).

The swift's Atlantic Coastal Plain flyway includes Chesapeake Bay (Calhoun and Dickinson 1942) where, at these latitudes, south transients may be encountered during mid-August through mid-October with the most activity during 5 September-10 October (Stewart and Robbins 1958, Walsh et al. 1999, Hess et al. 2000, Rottenborn and Brinkley 2007). South transient diurnal movements are usually >50 m (>164 ft) overhead (Steeves et al. 2014) with some swifts being recorded above clouds at altitudes of 2,126 m (6,975 ft) riding warm air masses up the slope of an advancing cold front (Williams 1956).

This study determined the timing of south transient Chimney Swift staging at sundown roost chimneys and morning migrants overhead at central Chesapeake Bay on the Atlantic Coastal Plain flyway, and also noted sunset staging roost behavior.

METHODS

This study is based on approximately 330 individual field day observations involving thousands of south transient swifts made during 1969-2014 along the east-central portion of the Chesapeake Bay flood plain. Those observations were subdivided into subsets based on their geographic location and/or status of the swifts (staging at roost chimneys, overhead migrants) at that location. From the subsets, two were selected for distribution analysis.

Subset one included 147 observation days of south transients found "staging at roost chimneys" in the commercial and residential districts of St. Michaels, Maryland (latitude 38.784268°, longitude -76.343471°). Observation days and swift tallies were taken from August-October in 1971-2014 personal field notes with an overwhelming majority of the observation days occurring post-1999. Observations at staging sites were made from a stationary position 30-60 m (98-197 ft) southwest of the roost chimney to avoid glare from setting and dusk sunlight. Observations covered the period 30 minutes before official sunset until dark, i.e., about one hour. Daily flock size at these sites never exceeded 150 swifts and usually ranged less than 50 individuals.

Subset two included 114 observation days of diurnal south transients found "migrating overhead" along the west side of Tilghman Island near the village of Fairbanks, Maryland (latitude 38.686978°, longitude -76.343471°) about 16 km (10 mi) southwest of St. Michaels. Observation days and swift tallies were taken from personal field notes, August-October in 1969-2014, with those days well distributed throughout the years. Observations were made during 0700-1000 hours while canvassing various habitats for all species of south migrant birds along public roadways 1.4-2.6 km (0.9-1.6 mi) north of the southern tip of the island. Daily flock size at this location rarely exceeded 50 individual swifts.

The transitory period for individual subsets of data was taken as the inclusive period from the first August day to the last October day that south transient swifts were detected at historical or new roost chimneys or noted migrating overhead with variables from inclusive days used for distributional analysis. Microsoft Excel 7 with inbuilt functions (COUNTIF, SQRT, SUM, and SUM PRODUCT) was used to calculate weighted means and standard deviations. Dates were converted to Julian days to facilitate calculations then back-converted to conventional dates. Box plots were created using these dates within the extreme dates of the transitory periods.

RESULTS

South transient Chimney Swifts at staging roost sites were first detected on 7 August with roost chimneys consistently hosting at least 2% of the seasonal transient population on 10 September-6 October, while roost numbers sharply declined thereafter with the last swift seen on 18 October (Figure 2: line graph). Nearly all south transient staging activity at roosting chimneys took place during a 51-day period (29 August-18 October) with the mean date of peak abundance on 23 September (Figure 2: box plot graph).

South transient swifts staged at the same roost chimney for the entirety of some seasons, while other seasons found that after several evenings use, they changed chimney sites and/or used more than one chimney some evenings. Aerial south

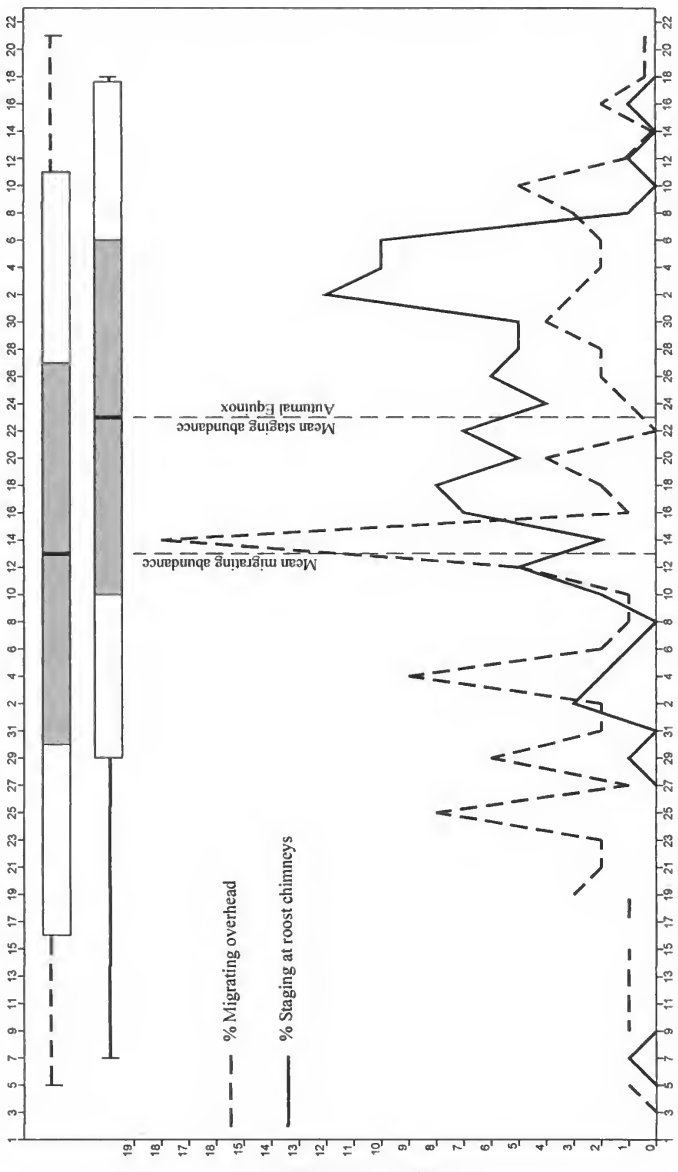

Figure 2. Chimney Swift (*Chaetura pelagica*) south transient timing in the Chesapeake Bay Coastal Plain, 1969-2014.

a) Box plot graph whiskers delimit transient period extremes. Boxes represent one (gray) and two (white) weighted standard deviations both sides of the weighted mean peak (black bars).
b) The 48-hour frequency interval ineludes swift tallies for that day and the previous day.
c) Percent is the ratio of frequency interval tallies divided by the grand total of all frequency interval tallies for the transient period.
d) Missing portions of line graphs in August are dates with no transient monitoring.

transient Chimney Swifts passing overhead along the east coastline of Chesapeake Bay were first noticed on 19 August with fluctuating increases and decreases in numbers on subsequent days, appreciably decreased numbers after 10 October, and the last swift seen on 21 October (Figure 2: line graph). Nearly all overhead south transients passed during a 57-day period (16 August-11 October) with a mean date of peak abundance on 13 September (Figure 2: box plot graph).

DISCUSSION

Progression of the Chimney Swift south transient season, and staging behavior at roost chimneys in this study did not differ appreciably from that reported in other studies. Similarly, transient timing dates and periods in this study closely aligned with those noted for other Chesapeake Bay latitudes and adjacent regional jurisdictions. Dates of south transient mean peak abundance coincided closely with occurrence of the autumnal equinox suggesting this celestial event may be an important indicator in timing of south transient Chimney Swifts at Chesapeake Bay Coastal Plain latitudes.

This study and others showed south transient swift activity may span up to 80 days or more (Peters 1937, Groskin 1945, Stewart and Robbins 1958, Michael and Chao 1973, Hess et al. 2000; Figure 2). South transient Chimney Swift timing dates for extreme arrival and departure, usual transient period, period of most abundance, and high counts in this study closely aligned with those timing dates noted for other Chesapeake Bay latitudes and adjacent regional jurisdictions (Table 1).

Table 1. Chimney Swift (*Chaetura pelagica*) south transient timing in the Mid-Atlantic States.

Location	Extreme Arrival	Usual Transient Period	Period of Most Abundance	Highest Counts	Extreme Departure	Reference
PA (Philadelphia)	1-7 AUG	1-7 AUG-11 OCT	21-27 SEPT	24 SEPT	16 OCT	Groskin 1945
DEL	13 AUG	10-15 AUG-5-10 OCT	No Data	20 SEPT	24 OCT	Hess et al. 2000
MD	No Data	15-25 AUG-10-20 OCT	5 SEPT-10 OCT	12 SEPT-5 OCT	2 NOV	Stewart and Robbins 1958
MD*	7 AUG	16 AUG-18 OCT	30 AUG-6 OCT	14 SEPT-3 OCT	21 OCT	(Present study)
VA	No Data	No Data-15 OCT	No Data	9 OCT	12 NOV	Rottenborn and Brinkley 2007
NC	No Data	No Data	No Data	No Data	15 NOV	Carolina Bird Club 2015

*Inclusive dates for migrating overhead and at staging roost chimneys

Absence of nine roost monitoring frequency intervals in August may have biased the mean date of peak roost abundance a few days later in September than if monitoring numbers had been available for those 18 days. Conversely, the 300+ swifts tallied on 14 September 1982 (Figure 2: line graph) is double that found on any other day in August-October during the 45 years. This anomaly may have biased the mean date of peak abundance for overhead migrants slightly earlier in September than if that doubling number had been more in line with other daily tallies during September. Considering the possibility that mean peak abundance may be biased later for staging roost swifts (23 September) and earlier for overhead swifts (13 September); the true date of peak abundance probably falls in the nine days between those dates. Coincidentally, the autumnal equinox (22-23 September) falls at or near the end of this period, suggesting this celestial event may be an important proximal cue in timing of south transient Chimney Swifts at Chesapeake Bay Coastal Plain latitudes.

Importance of the equinox is also implicated in south transient staging roost counts during 21 August-11 October at Ardmore (latitude 40.007777°) near Philadelphia, Pennsylvania, 158 km (98 mi) northeast of this study, that showed 50% of the seasonal flock occurred during the period 19-27 September 1944 (Groskin 1945). Similarly, banding south transient swifts over a 32-year period (1944-1976) at staging roost chimneys on the campus of Kent State University (latitude 41.146817°), at Kent, Ohio during 2 August-28 September showed 49% of the seasonal flock occurred during the period 18-22 September (Dexter 1990). Accordingly at approximately 901 km (560 mi) south of central Chesapeake Bay (latitude 38.701648°), an operation banding over 20,000 swifts at Baton Rouge (latitude 30.457975°), Louisiana in 1937-1939 found transient swifts most abundant on 27 September (Lowery 1943).

Studies relate that swift staging behavior at roost chimneys follows a basic pattern of near sunset gathering, circling the chimney, chattering, dipping, and entry about 20 minutes after sunset. However, behaviors may be variable within any portion of this pattern. Annual, seasonal, or even day-to-day changes in flock selection of a roost chimney found in this study was concurred in other studies (Green 1930, Pickens 1935, Coffey 1936), while variable aerial activity starting times and duration was also noted by Pickens (1935) and Michael and Chao (1973). Chimney circling, chattering, dipping, accumulating numbers of individuals, occasional flock departures for periods of time with sudden reappearances, and increased activity and intensity with approaching darkness are noted in other studies as well (Pickens 1935, Coffey 1936, Bent 1940, Michael and Chao 1973, Kyle and Kyle 2005). Those studies found both clockwise and counterclockwise flock circling while this study found only counterclockwise circling. Prevailing wind (direction, drafts, temperature), chimney visibility (light illuminated, in shadow, poorly focused), nearby

protruding obstacles (antennas, guy wires, other chimneys or buildings, roof-top heating/air conditioning units), human interference (activity, noises, lights), or missed staging cues within the roosting flock may be among the many factors that might contribute to the circling direction of staging flocks. The majority of the flock entering the chimney at approximately 15-20 minutes after sundown is in agreement with other studies (Michael and Chao 1973, Zammuto and Franks 1981, Kyle and Kyle 2005). I seldom saw more than eight swifts entering the chimney at one time helicoptering down tail-first, while urban flocks numbering in the thousands are reported to funnel en masse into big commercial chimneys (Pickens 1935; Coffey 1936, 1938; Bent 1940; Green 1940; Groskin 1945). Burns (1899) and Kyle and Kyle (2005) also observed only a few swifts at a time entering the roost. The difference in simultaneous entry numbers may be attributed to the smaller residential chimney openings versus the large commercial chimney openings that may even allow birds to enter head-first (Steeves et al. 2014). This study was consistent with the data presented in Kyle and Kyle (2005) where a majority (<50 individuals) of the swifts entered the chimney within a 5-6 minute period. Bent (1940) reported it took a flock in excess of 13,000 more than 15 minute to enter a commercial chimney in Atlanta, Georgia, and similarly Groskin (1945) noted it took 10,000 swifts a variable 25-55 minutes (average 37 minutes) to enter a large commercial chimney near Philadelphia, Pennsylvania. A few late lingering swifts either disappearing from view and/or entering the chimney after dark were also related by others (Pickens 1935, Bent 1940, Kyle and Kyle 2005).

In conclusion, Chimney Swift south transient timing at staging roost chimneys and migrants overhead, plus sundown behavior at roost chimneys did not differ appreciably from that reported from other studies. However, the autumnal equinox coincided closely with the mean peak abundance in this study and transient high counts in other studies, suggesting that the celestial event may be an important indicator in the timing of south transient Chimney Swifts.

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Transmission Tower Nesting by American Kestrels (*Falco sparverius*) within a Suburban Corridor

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According to the *2nd Atlas of the Breeding Birds of Maryland and the District of Columbia* (Ellison 2010), the American Kestrel (*Falco sparverius*) continues to breed within urban environments, including Baltimore, Maryland and Washington, District of Columbia. However, statewide, American Kestrels decreased in distribution by about one third (Ellison 2010) compared to the first breeding bird atlas (Smith 1996) conducted 20 years earlier. Many of these losses were from the Piedmont and Coastal Plain regions where urbanization and suburbanization have increased. The decrease in American Kestrel distribution is likely attributable to loss of suitable nesting and foraging habitat within these developed or developing areas. This note documents confirmation of breeding of four pairs of American Kestrels within a 15.9 km (9.9 mi) long transmission line right-of-way within a suburban corridor in northwestern Prince George's County, Maryland. The note also describes a novel nesting substrate for kestrels within the region.

The kestrels were observed during a routine raptor nest survey for proposed transmission line work on 10-11 June 2014. The transmission line corridor begins just outside the limits of the District of Columbia within a densely developed residential area. It extends north along the I-95 corridor to just south of Sandy Spring Road (MD Route 198) (Figure 1). The land use within much of this corridor is residential, commercial, and institutional development. However, the corridor crosses a portion of the Beltsville Agricultural Research Center and several forested stream valley parks. The approximately 60-m (197-ft) wide transmission right-of-way is comprised of two transmission lines. The corridor is maintained as upland meadow, emergent scrub, or shrub wetland within an otherwise built or forested landscape. These maintained open habitats within the transmission line right-of-way provide suitable foraging habitat for kestrels. During the raptor nest surveys, kestrels were observed nesting within the hollow cross-arms of the metal mono poles between University Boulevard (MD Route 193) and the Intercounty Connector (MD Route 200).

The southernmost nest occurred just south of the crossing of Northwest Branch. Another nest was located four poles northward (approximately 1 km [0.6 mi]),

Figure 1. The transmission line project area showing locations of mono pole nesting American Kestrels in 2014 and likely nesting in 2012.

immediately south of Adelphi Road. The two northernmost nests were on successive poles 242 m (794 ft) apart, north and south of Aitcheson Road. All nests were in the hollow cross-arms of the metal mono poles.

Mono poles were approximately 27 m (90 ft) tall. Each pole contained three main cross-arms and a short top cross-arm (Figure 2). The lowest cross-arm was approximately 15 m (50 ft) above ground. The cross-arms are hollow, but contain a plate across the end of the arm that attaches to the mono pole (Figure 3). The metal plate has two, vertically arranged, round openings that are approximately 8 cm (3 in) in diameter—the recommended hole size for American Kestrel nest boxes (American Kestrel Partnership 2011). The cross-arms are bolted to the mono pole on metal brackets providing a space of approximately 13 cm (5 in) at the top and bottom for kestrel access.

At each nest location, male kestrels were observed perched on transmission wires near a mono pole. Confirmation of breeding was documented when the male kestrel captured prey and either took the prey directly to the nest location in the cross-arm or returned to the wire where the female exited the cross-arm nest location, took the prey, and returned to the cross-arm, presumably to feed young. Prey items were not identifiable to taxa in most instances, but small mammals were observed in at least two of the four feeding events.

Three of four nests were in cross-arms extending to the east. Two nests were within the second cross-arm up from the ground, while one each was within the lowest cross-arm and the third cross-arm from the ground. Beasley and Parish (2009) documented Southeastern American Kestrels (*Falco sparverius paulus*) nesting in the cross-arms of 230 kV transmission towers in Georgia. However, these towers were different in shape from the mono pole structures, and the birds were nesting in the open ended round cross-arms.

The current observations appear to represent the first documented nesting by American Kestrels in a mono pole transmission structure. While the nests were not followed to determine whether the young fledged successfully, this note at least provides evidence that American Kestrels can successfully hatch young within the cross-arm structure.

Also, a similar raptor nest survey along the same line in mid July 2012 documented fledged young kestrels with a pair of adults on the same transmission pole south of Northwest Branch where a nest was documented in 2014. The birds were not observed entering the cross-arm, but it does seem likely that the pair successfully nested in the same mono pole structure. The 2012 survey also found a kestrel pair one pole south of the pole just south of Adelphi Road where a pair nested in 2014, and an adult female near the 2014 nest just south of Aitcheson Road, suggesting that these birds have been using the same or nearby nest structures over several years.

Figure 2. A metal mono pole with tubular cross-arms where American Kestrels are nesting along the Burtonsville to Takoma transmission line in northwestern Prince George's County, Maryland. Location of the kestrel access at the base of the cross-arm.

Figure 3. Detail of the 8-cm (3-in) holes providing American Kestrel nesting access to the hollow cross-arm.

Kestrels nested in 4 of 52 (8%) mono poles with suitable cross-arm nest sites. This density is considerably lower than observed by Beasley (2007) in Georgia where Southeastern American Kestrels nested in 284 of 471 (60%) towers with tubular cross-arms. However, the Beasley (2007) study area was in rural Georgia, while this observation occurred within a suburban location just outside the District of Columbia. Also, during the 2012 raptor nest survey, adult and fledgling kestrels were observed at four additional locations within the study area where the four nested in 2014 (Figure 1). If kestrels also nested in those locations in 2014, but were missed during the survey, this would double the observed density within the corridor.

The conclusion reached from these observations is that American Kestrels can and do successfully nest within the tubular cross-arms of metal mono pole transmission structures within a suburbanized area just outside the District of Columbia. The proposed work for which the raptor survey was completed is the replacement of the older lattice towers with metal mono poles similar to the ones the kestrels were using. This replacement will increase the number of potential nest sites for kestrels in the future.

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2015 Maryland May Count

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The annual May Count was held on Saturday, 9 May 2015. Results were submitted from 20 of Maryland's 23 counties, one more than submitted results for the 2014 May Count.

Weather statewide on 9 May varied from mostly clear in the far west to mostly cloudy all day at the coast. Heavy clouds with some fog, drizzle, and mist covered most of the state through the morning hours.

Table 1. 2015 Maryland May Count: participating counties, county codes, and compilers.

County	Code	Compiler
Garrett	GA	Nadine Jakubowski
Allegany	AL	J. B. Churchill
Frederick	FR	Michael Welch
Montgomery	MO	Diane Ford
Carroll	CA	Don Jewell
Howard	HO	Kevin Heffernan
Baltimore	BA	Joel Martin
Prince George's	PG	Fred Fallon
Anne Arundel	AA	Dotty Mumford
Charles	CH	George Jett
Calvert	CT	Sherman Suter
St. Mary's	SM	Patty Craig
Harford	HA	Rick Cheicante
Cecil	CE	Richard Donham
Kent	KE	Walter Ellison
Talbot	TA	Les Coble
Dorchester	DO	Harry Armistead
Caroline	CN	Debby Bennett
Wicomico	WI	Ellen Lawler
Worcester	WO	Marcia Balestri

A total of 339 counters in 215 parties reported 240 species and 107,959 individual birds. Among the most unusual sightings reported were (as compared with recent years): 83 Brant (Worcester); 6 White Pelicans (1 in Charles, 5 in Dorchester); 1 Sandhill Crane (Prince George's); 2 Whimbrels (1 each Dorchester and Worcester); 2 Red Knots (Worcester); 11 Purple Sandpipers (1 in Dorchester, 10 in Worcester); and 3 Dickcissels (Kent).

Table 2. 2015 Maryland May Count: summary.

	GA	AL	FR	MO	CA	HO	BA	PG	AA	CH	CT	SM	HA	CE	KE	TA	DO	CN	WI	WO	Total
Parties	14	7	10	2	9	45	8	14	14	6	7	7	11	5	4	6	8	15	11	12	215
Observers	22	8	18	2	16	60	11	31	19	10	10	13	23	8	7	6	13	22	14	26	339
Start Time	04:30		0400	0530	0530	0435	0700	0530	0600	0430	0418	0300		0430			1200	0430	0545		
Stop Time	23:28		1830	1230	1930	2035	1910	1950	1900	2030	2049	2115		1530			2045	2030	1900		
Driving																					
hours	48	15.75	59.5	1	23.95	27.9	0.3	9	17.5	17.5	5.5	31.75	14.5	8	22.5	5.3	45	25	19.25	20	417
miles	298.2	70	654	13	234	369	5	101	98.3	150	26	437	142	75	167	61	529	300	226.5	136	4092
Walking																					
hours	69.75	21	30.25	7	31.45	201	31.4	60	50	25.5	36	25.5	47	45	12	5	56	52	16.25	19	841
miles	98.9	13.8	20.5	6	29	157	16.5	51	46	14.5	0024	21.5	27.5	18.25	11	2	24	21	14.5	20	637
Owling																					
hours	4	3	2			2		1.8		1.15	0.75	5.25		5		2	10	2		1	40
miles	42.4		2			1				0.5						31	51	15		1	144
Stationary																					
hours	33.5		2.5		4.75	4			5		3.6		1	1				18	22.25	8	95.6
Other								boat		bike				canoe						canoe	
hours	2							4		3				2						2	13
miles	18							3.5		2				3						2	28.5
Total Species	138	116	125	68	106	136	108	122	118	110	126	139	142	108	116	91	154	139	108	149	240
Total Individuals	6318	1811	8881	452	5488	13334	2833	3191	4509	4084	4086	7111	6215	2673	6353	1145	12705	7707	3493	5902	107959

Several duck species usually lingering in small numbers were missed including Gadwall, Northern Shoveler, Ring-necked Duck, and Black Scoter. A number of compilers noted the lack of migrants in their respective counties. A tropical storm off the Carolinas kept a steady wind blowing out of the north over much of the southeast, seriously impeding the flow of migrants. Thanks to John McKitterick for this information. When compared with results from the three previous May counts for which data has been compiled (2003, 2013, and 2014), notably low counts were recorded in 2015 for most thrushes and eighteen species of warblers. In contrast, high counts were recorded for early arriving, local breeding warblers, such as Prothonotary, Yellow-throated, and Pine Warblers. The drop in warbler numbers is reflected in the total number of warblers reported on a "per hour of effort" basis for the last four years for which May count data has been compiled. The warblers/hour of effort was 9.9, 6.0, 6.6, and 4.6 for 2003, 2013, 2014, and 2015, respectively.

It is encouraging to see more participation in the May Count, but some counties are still not reporting results and a few large population counties would do much better with more people in the field. On a personal note, my wife and I are moving to Oro Valley, Arizona, so this will be my last state May Count report.

Table 3. 2015 Maryland May Count: observed species.

Species	GA	AL	FR	MO	CA	HO	BA	PG	AA	CH	CT	SM	HA	CE	KE	TA	DO	CN	WI	WO	Total
Snow Goose																				6	6
Brant																				83	83
Canada Goose	201	47	343	16	353	665	174	189	172	85	37	128	268	165	53	7	210	212	214	189	3728
Mute Swan			1									12	2					1			16
Tundra Swan									1			1									2
Wood Duck	16	5	21	1	15	24	8	35	3	13	19	1	30	4	34	4	24	44	21	20	342
American Wigeon																				2	2
American Black Duck												3					39			7	49
Am. Black Duck/Mallard hybrid																	1			1	2
Mallard	60	33	108	1	34	98	51	30	43	16	43	19	35	17	88	115	249	29	41	61	1171
Blue-winged Teal																	2			2	4
Green-winged Teal													1							3	4
Greater Scaup																	4				4
Lesser Scaup															1					1	2
Surf Scoter																	5			1	6
Bufflehead	3						2		1	1											7
Hooded Merganser			1	4			1														6
Common Merganser	12	2	3										1								18
Red-breasted Merganser																	1			5	6
Ruddy Duck			1				3								53		25			2	84
Northern Bobwhite												3					9	10	2		24
Ruffed Grouse	9	4																			13
Wild Turkey	25	1	6		2	9		21	5	3	10	10	42	1	9	6	28	56	13	3	250
Red-throated Loon									1											3	4
Common Loon	5	1					2	1	3		2	6	37	2	3		15			13	90
Pied-billed Grebe							1	1					1								3
Horned Grebe								1													1
Northern Gannet																				10	10
Double-crested Cormorant	2	2	3			8	76	23	99	113	37	454	698	55	65	67	536	33	17	119	2407
Great Cormorant												2									2
American White Pelican										1							5				6
Brown Pelican												25					34				59
American Bittern						1								1				1			3
Least Bittern								2					1				1		3		7
Great Blue Heron	2		15	1	14	35	21	26	47	46	15	69	56	84	37	8	88	38	21	3	626
Great Egret			2				5	1				1	1		3		48	1		42	104
Snowy Egret											28						37	2		19	86
Little Blue Heron									2								3				5
Tricolored Heron																				7	7
Cattle Egret														1		7		3		3	14
Green Heron	5	4	3	4	5	30		4	10		2	12	4		6	2	10	8	2	7	118
Black-crowned Night-Heron			17			1	1					1					4			14	38
Yellow-crowned Night-Heron							1														1
Glossy Ibis													2				2	3		31	38
Black Vulture	1	1	35	1	24	88	33	29	25	55	7	62	82	47	61	1	27	48	18	7	652
Turkey Vulture	95	21	126	4	78	207	14	43	40	106	81	93	113	60	166	29	212	241	81	96	1906
Osprey	2	1	3			6	20	31	44	92	42	142	53	22	83	15	248	39	34	17	894
Bald Eagle	3	1	3		2	9	11	7	5	34	12	14	53	27	21	11	156	15	11	6	401
Northern Harrier								2					2				5			1	10
Sharp-shinned Hawk	1				1	1	1		1				1								6
Cooper's Hawk	3		4		4	8		1	3			1	3		1		2	2	1		33
Red-shouldered Hawk	5	1	10		9	45	10	3	9	15	6	8	5	2	2		1	6	2	2	141
Broad-winged Hawk	7	1	6			1			1												16
Red-tailed Hawk	18	3	24		17	24	4	10	5	8	2	8	15	2	9	2	19	14	9	1	194
Clapper Rail												5					18		1	5	29
King Rail													1				2				3
Virginia Rail					1	1					1		3			1	55	2			64
Sora	1					1						2	1								5
Common Gallinule							1					1					5				7
American Coot	2		1			2		1									1				7
Sandhill Crane								1													1
Black-necked Stilt																	6				6
American Oystercatcher																	2			10	12
Black-bellied Plover															50		67	2		148	267
Semipalmated Plover											12		7	21	120		219	40		19	438
Piping Plover																				2	2

Species	GA	AL	FR	MO	CA	HO	BA	PG	AA	CH	CT	SM	HA	CE	KE	TA	DO	CN	WI	WO	Total
Killdeer	46	15	22		7	24	7	13	9	11	5	19	26	2	1	4	19	32	11	9	282
Spotted Sandpiper	9	2	6		1	10	5		10			2	1		2	1	2	7		1	59
Solitary Sandpiper		2	7			22	3	1		1	1	1	5	1			1			1	46
Greater Yellowlegs								8		3	1	3	4	15	11	1	35	15	1	92	189
Willet																2	15			86	103
Lesser Yellowlegs		3	2					1		2	3		7	2	3	1	32	7	5	80	148
Whimbrel																	1			1	2
Ruddy Turnstone																	3			13	16
Red Knot																				2	2
Sanderling																	10			17	27
Dunlin											5						744		47	374	1170
Purple Sandpiper																	1			10	11
Least Sandpiper		6				29	29	1			70	14	34	20	67	2	232	64	13	328	581
White-rumped Sandpiper											1						1			5	7
Pectoral Sandpiper													1				1				2
Semipalmated Sandpiper	1										11		8		7	2	58	11		79	177
peep sp.															10						10
Short-billed Dowitcher																	13			19	32
Wilson's Snipe						2							2					8		1	13
American Woodcock	5	2											5					2			14
Bonaparte's Gull										1	4				1			2			8
Laughing Gull								2	292	2	28	264		5	7	81	1253	548	218	482	3182
Ring-billed Gull					1		25	1	37	59	103	60	17	105	1046	19	236	326	2	28	2065
Herring Gull							7		49	9	12	66	2	4	5	4	196		4	234	592
Lesser Black-backed Gull																				20	20
Great Black-backed Gull							37		15	1	27	15	1	5	3		29	1	4	130	268
gull sp.												4									4
Least Tern							21		4		7		30	10	28	1	28	8		93	230
Caspian Tern									1	3			18		2		1			5	30
Common Tern									23		4					3	14	14		37	95
Forster's Tern								4		2	11	3		7	21		131	8	24	68	279
Royal Tern									3	5		11					1			86	106
Rock Pigeon	51	24	86		67	70	44	44	41	2		3	39	2	12		42	61	10	30	628
Mourning Dove	106	39	197		2	138	339	52	61	105	72	68	103	87	40	44	35	137	173	103	34	1935
Yellow-billed Cuckoo		3	11	4	2	7	2	11	12	16	15	20	8		5	3	20	10	15	5	169
Black-billed Cuckoo	1	1	2			3		1	1										1		10
Barn Owl													3								3
Eastern Screech-Owl	2		2			4		1	2		3	1	2			3	4	6	2		32
Great Horned Owl		1	2		2	8			1			1	3			2	7	6		2	35
Barred Owl	10	3	4	4	11	18	1	6	5	2	8	2	6	2	3	1	2	9	3	3	103
Common Nighthawk							1				2						2	3			8
Chuck-will's-widow											1	15			2	1	49	1		6	75
Eastern Whip-poor-will	8												60	4			5	2	1	1	81
Chimney Swift	39	39	130	2	61	99	94	47	52	40	19	28	33	10	77	7	57	588	22	36	1480
Ruby-throated Hummingbird	63	1	8		12	19	5	7	11	8	7	11	11	2	7	5	37	28	16	20	278
Belted Kingfisher	3		6		11	20		1	4	2	5	5	3	2		2		5			69
Red-headed Woodpecker	15		8		7	0				8	15	4	7				26		3	9	102
Red-bellied Woodpecker	54	19	104	11	82	275	36	51	71	58	54	65	53	21	47	7	32	50	34	4	1128
Yellow-bellied Sapsucker	8					0															8
Downy Woodpecker	36	4	26	5	31	94	25	11	28	17	19	12	27	7	22	2	27	20	11	8	432
Hairy Woodpecker	31	2	8		10	26	3	8	4	3	3	6	11	2	9	2	5	9	2	1	145
Northern Flicker	42	10	17	1	7	47	8	2	10	2	7	12	7	1	8		22	9	4	4	220
Pileated Woodpecker	25	7	10	2	12	38	1	10	14	13	12	10	15	6	9	3	19	24	5	5	240
American Kestrel	1	1	7		2	2		3				1	2					2			21
Merlin													1								1
Peregrine Falcon						1															1
Eastern Wood-Pewee	15	2	46	5	13	66	10	18	24	37	47	29	20	11	21	6	39	28	14	39	490
Yellow-bellied Flycatcher								1													1
Acadian Flycatcher	5	4	44	9	21	121	6	32	10	61	89	70	39	8	62	1	24	10	17	30	663
Alder Flycatcher			1																		1
Willow Flycatcher	4					10		1			1										16
Least Flycatcher	16	1						1										1			19
Empidonax sp.			3		1	2															6
Eastern Phoebe	28	11	30		34	46	5	11	11	16	5	6	15	4	7			8	3	4	244
Great Crested Flycatcher	13	4	72	16	57	119	21	23	42	56	62	124	50	25	68	21	217	114	78	64	1246
Eastern Kingbird	20	2	88	2	48	113	29	13	18	18	16	20	58	29	16	1	38	24	20	22	595
White-eyed Vireo	7	1	20	8	24	60	4	34	18	49	44	37	18	16	33	8	59	28	49	75	592
Yellow-throated Vireo	6	4	3	10	5	29	1	7	2	17	15	5	33	3	6		4	2	3	7	162
Blue-headed Vireo	12	2	3		1	2			3										3		26
Warbling Vireo		9	27		6	34	16	1	3		1	3	14	3	3						120

Species	GA	AL	FR	MO	CA	HO	BA	PG	AA	CH	CT	SM	HA	CE	KE	TA	DO	CN	WI	WO	Total
Philadelphia Vireo						0										1					1
Red-eyed Vireo	211	78	138	16	85	415	49	142	132	175	212	212	126	47	127	4	97	66	33	36	2401
Blue Jay	142	73	157	9	122	343	60	40	354	45	49	83	76	56	46	18	61	98	10	8	1850
American Crow	195	30	179		265	392	51	54	124	135	101	135	143	49	39	19	153	130	71	38	2303
Fish Crow		2	31		18	43	35	23	27	13	27	52	29	7	23	9	28	31	21	23	442
crow sp.			33			114	5				3	45			10				33	1	244
Common Raven	30	5	3			5			2												45
Horned Lark			23		5	22	1			3		24	7		26	4	17	41	4	16	193
Purple Martin	17		95		17	88	2	15		43	11	47	35	62	94	40	328	182	121	31	1228
Tree Swallow	107	10	86	14	61	196	42	127	29	36	9	3	171	26	49	11	148	53	11	11	1200
Northern Rough-winged Swallow	10	21	41		13	34	74	10	3	6	20	8	38	99	13	4	1	7	1		403
Bank Swallow	1					2	4						21	70							98
Cliff Swallow	17	51			23	35			3									5			134
Barn Swallow	196	14	231	2	200	286	93	83	100	142	75	173	218	28	167	47	318	201	126	115	2815
Carolina Chickadee			103	10	96	264	49	32	71	66	101	110	75	34	57	11	122	66	47	24	1338
Black-capped Chickadee	91	17																			108
Tufted Titmouse	64	32	124	11	108	329	44	76	100	117	136	142	64	28	70	15	143	120	52	39	1814
Red-breasted Nuthatch	10					1						1									12
White-breasted Nuthatch	38	21	22	5	25	86	9	8	28	10	11	12	15	8	3			11	1	4	317
Brown-headed Nuthatch												8			2		63	1	9	7	90
Brown Creeper	1																				1
House Wren	42		8	116		56	115	26	1	9	1	1	4	20	7	6	1	40	11	14	20	498
Winter Wren	1																				1
Marsh Wren								5		5		2	3	1	2	1	34	5			58
Carolina Wren	4	37	161	10	50	171	11	36	54	44	46	67	14	10	73	15	81	72	62	22	1040
Blue-gray Gnatcatcher	21	12	147	34	89	248	42	52	78	79	97	43	128	31	70	3	79	10	59	94	1416
Golden-crowned Kinglet	3																				3
Ruby-crowned Kinglet	1					5			1								1	1	2		11
Eastern Bluebird	43	10	80	2	71	143	10	19	36	16	15	12	66	7	16		39	39	5	5	634
Veery	3	2			5	3	1		2		8	1	5	1		21					52
Gray-cheeked Thrush								1													1
Swainson's Thrush	3		1	1		3		5			6		3								22
Hermit Thrush	11					1												4			16
Wood Thrush	23	13	124	8	63	300	16	61	38	54	79	66	47	50	64	25	37	37	10	30	1145
American Robin	443	162	469	1	208	594	214	70	310	56	47	124	116	53	167	16	223	403	200	55	3931
Gray Catbird	108	43	274	12	313	461	32	15	26	11	24	57	153	53	55	4	25	37	25	43	1771
Brown Thrasher	27	16	24		17	38	1	18	16	18	11	78	9	9	28	16	17	27	9	15	394
Northern Mockingbird	2	15	113		36	145	20	25	59	40	28	97	57	18	65	8	101	131	41	15	1016
European Starling	212	116	690	3	406	630	194	328	182	158	78	676	391	129	397	14	639	744	181	236	6404
American Pipit			1			11		4													16
Cedar Waxwing	13	6	39	10	41	46	30	27	7	35	2	18	35	4	31			9			353
Ovenbird	95	20	60	2	44	183	4	55	27	78	39	111	26	79	69	8	111	23	30	82	1146
Worm-eating Warbler	4	3	2		4	15		1	5	6	21	24	7	13	22	3	8	3	19	13	173
Louisiana Waterthrush	7	8	10	1	8	54	2	1	2	20	9	5	12	3	1		4	4	1	11	163
Northern Waterthrush	8	5		1		3		2					1					1			21
Golden-winged Warbler	2	1																			3
Blue-winged Warbler	1	1				6					1	1	5					1			16
Black-and-white Warbler	30	7	5	1	5	27	5	4	5	11	27	25	16	9	9		11	2	15	25	239
Prothonotary Warbler		1	4	10			1	7	11	12	4		13		10		28	12	18	53	184
Tennessee Warbler	2	1	1																		4
Nashville Warbler								4	1												5
Kentucky Warbler	4	3			1	12		3		9	10	12	8		10		1	6	1	5	85
Common Yellowthroat	165	34	72	14	100	251	26	36	20	62	91	85	66	25	60	23	237	22	41	45	1475
Hooded Warbler	18	1	2	1		10		16	9	17	51	33		13						1	172
American Redstart	78	10	23	3	7	55	2	9	24	11	8	5	34	4			1	4	1	9	288
Cape May Warbler			1														1				2
Cerulean Warbler	17		1		1	4						1	15								39
Northern Parula	24	1	26	8	17	125	4	22	22	79	103	42	64	10	15		7	4	5	21	599
Magnolia Warbler	24					3						2	1					1			31
Bay-breasted Warbler				1																	1
Blackburnian Warbler	11																				11
Yellow Warbler	90	19	59		45	81	8	5	4	4	2	7	25	1			4	2		2	358
Chestnut-sided Warbler	97	5	1	1		3					1	1	2					1			112
Blackpoll Warbler			1			3	6	3	4	13	13	15	9	7	3	1	1	1	1		81
Black-throated Blue Warbler	27	2	2	2	8	8			5		5	5	3					2		1	70
Palm Warbler						3					1							3			7
Pine Warbler	2	1	3		4	5	2		1	12	18	53	1	22	10	6	137	3	28	44	352
Yellow-rumped Warbler	4	2	4		12	15	1	2		11	5	8	62	5	2		6	8	1	2	150
Yellow-throated Warbler	1					2		1	7	20	30	20	12	3	1		10		7	39	153
Prairie Warbler	1	1	9	1	2	30		13	16	21	9	30	21	9			30	6	55	30	284
Black-throated Green Warbler	56	2	2	1	3	2			2		1	4	2	3				1		1	80

Species	GA	AL	FR	MO	CA	HO	BA	PG	AA	CH	CT	SM	HA	CE	KE	TA	DO	CN	WI	WO	Total
Canada Warbler	4					2							1								7
Wilson's Warbler					2	1															3
Yellow-breasted Chat	2	2	6	4	1	10	2	13		16	14	27	13	5	13	2	15	11	4	5	165
Eastern Towhee	175	34	90	2	69	160	4	48	20	18	28	25	16	61	35		38	8	9	28	868
Chipping Sparrow	185	22	255	5	117	279	12	49	62	69	85	116	113	36	106	29	203	122	77	54	1996
Field Sparrow	57	19	102	1	30	54	1	17	3	15	7	19	7	24	15	1	18	8	8	20	426
Vesper Sparrow		1	8									2			2						13
Savannah Sparrow	14					18	10	12		1		9	14		1		3	3		1	86
Grasshopper Sparrow	6	8	50		2	20	6	7	14	17	5	149	25	1	15	10	42	27	7	3	414
Henslow's Sparrow		2																			2
Saltmarsh Sparrow																	2			1	3
Seaside Sparrow												2					132			7	141
Song Sparrow	167	39	183		88	157	19	14	5	8	31	40	26	10	21	1	3	11	13	18	854
Swamp Sparrow	27	4			5	3	7	1		10	1	1		1			8				68
White-throated Sparrow	6	5	12	2	18	15	4	7	2	3	5	5	5	3	4	1	3	11	2		113
White-crowned Sparrow	8	1	3			1		1						1	1						16
Dark-eyed Junco	6				1																7
Summer Tanager								8	4	17	56	34		1		2	66	8	15	35	246
Scarlet Tanager	84	29	41	3	38	145	11	22	26	38	33	45	30	23	29	3	20	13	4	17	654
Northern Cardinal	94	62	387	20	233	752	81	87	265	113	207	215	171	65	216	33	199	212	86	60	3558
Rose-breasted Grosbeak	66		1	1	3	4				3	2	1						2		1	84
Blue Grosbeak			6			7	7	14	7	20	22	29	24		42	4	72	50	41	25	370
Indigo Bunting	81	43	205	31	50	234	38	85	55	160	112	134	93	44	168	9	140	98	51	128	1959
Dickcissel															3						3
Bobolink	77	1	3		1	13	1				4	5	36	9	5			3			158
Red-winged Blackbird	575	51	516	28	276	561	152	210	192	234	269	292	335	146	411	89	952	340	110	138	5877
Eastern Meadowlark	39	7	44		4	16	1		2	7	3	48	18		1		17	3	2		212
Rusty Blackbird	11																				11
Common Grackle	167	59	617	4	150	201	103	82	169	236	79	589	144	50	421	42	515	486	267	160	4541
Boat-tailed Grackle												2					18			35	55
Brown-headed Cowbird	23	19	132	12	77	237	51	54	51	41	91	64	106	48	119	21	143	165	58	120	1632
Orchard Oriole	8	11	24	4	9	67	20	19	14	36	15	38	58	44	27	9	88	29	23	13	556
Baltimore Oriole	103	12	94	1	49	140	16	3	7	5	3	2	43	44	14	1	1	14			552
House Finch	23	18	84		58	100	37	3	38	24	38	57	24		21	4	17	77	17	9	649
Purple Finch	21		3		1																25
Pine Siskin	24	1	2			4			2			1									34
American Goldfinch	196	56	280	25	160	405	92	47	125	51	84	85	108	70	91	16	138	86	48	21	2184
House Sparrow	51	31	202	1	159	236	44	28	35	64	79	148	31	9	120	14	104	142	41	50	1589

"On Golden Pond" by Ellen Lawler

A watercolor (the original is in color) painted in July 2008. The painting is based mainly on a photo Ellen took at Schumaker Pond in Salisbury, Maryland in November 2007.

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2015 Maryland Fall Count

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The annual Maryland Fall Count is held on the third weekend in September with the choice of Saturday or Sunday at the discretion of the county and/or compiler. In 2015, thirteen of Maryland's 23 counties submitted results. Eight counties counted on 19 September, five on 20 September (Table 1). Receiving results from thirteen counties is a slight improvement in participation for the Fall Count. For several counties this seasonal count has been a long held tradition, with this year being the 25th count for Allegany, 22nd for Howard, and 20th for Dorchester.

Table 1: 2015 Maryland Fall Count: participating counties, county codes, survey dates, and compilers.

County	Code	Survey Date	Compiler
Allegany	AL	20 September 2015	Chuck Hager
Washington	WA	19 September 2015	Doris Berger
Carroll	CA	19 September 2015	Don Jewell
Howard	HO	19 September 2015	Mike McClure, Chuck Stirrat
Baltimore	BA	19 September 2015	Joel Martin
Harford	HA	20 September 2015	Rick Cheicante
Cecil	CE	19 September 2015	Patricia Valdata, John Taylor
Prince George's	PG	20 September 2015	Dave Mozurkewich
Calvert	CT	20 September 2015	David Gillum
Kent	KE	20 September 2015	Walter Ellison, Nancy Martin
Caroline	CN	19 September 2015	Debby Bennett
Talbot	TA	19 September 2015	Wayne Bell
Dorchester	DO	19 September 2015	Harry Armistead

As would be expected, weather varied over the extent of the state and from Saturday to Sunday. Temperatures were generally cooler on Sunday with highs in the mid 70s °F with the exception of Allegany (66 °F) and Kent (84 °F), whereas all counts on Saturday had highs in the high 80s °F except for Washington County (65 °F). Lows ranged from 49 °F (Allegany) to 75 °F (Caroline). All reported calm to light winds. Most reported clouds early with

clearing throughout the day. There were no reports of precipitation for either day, however all counts on Saturday reported early morning fog lasting into mid-morning. Many compilers described the birding as slow with limited migrants.

A total of 209 field observers in 139 parties turned up 195 species and 56,083 individual birds (Table 2). They spent a total of 451.6 hours and covered 323.9 miles on foot and spent 31.0 hours stationary. Birders spent 168.8 hours and 1839.3 miles birding by car. Numerous observers spent 14.0 hours riding the Baltimore Harbor water taxi for views of two unexpected Brown Boobies first confirmed the day before the count. Observers covered 16.5 miles in 6.5 hours by other modes of transport. Participants in six counties reported spending 20.0 hours driving 69.4 miles while owling. Feeder watchers spent 40.5 hours.

Table 2. 2015 Maryland Fall Count: summary.

	AL	WA	CA	HO	BA	HA	CE	PG	CT	KT	CN	TA	DO	Total
Total Species	79	64	93	124	84	72	47	98	99	118	102	59	146	195
Total Birds	1538	1436	4944	9491	2994	1374	441	6821	5866	4214	5255	359	11,350	56,083
Start Time	7:00		6:00	5:30		7:00	8:00	5:45	3:45	5:40	4:30	8:00	4:45	3:45
Stop Time	16:15		21:15	23:45		19:00	15:30	19:10	19:00	22:00	22:30	12:05	19:45	23:45
Parties	8	3	12	41	29	4	2	11	6	4	8	2	9	139
Individual People	8	6	21	58	39	6	3	13	9	7	15	3	21	209
Hours Driving	4.8	15.0	22.6	27.3		6.0		11.2	6.9	21.0	19.0		35.0	168.8
Miles Driving	65.0	175.0	219.5	300.2		44.0		137.6	37.0	128.0	261.0		472.0	1839.3
Hours Walking	18.3	6.0	71.5	157.5	31.4	9.0	7.0	42.7	3.5	19.0	31.8	3.9	50.0	451.6
Miles Walking	16.8	6.7	40.5	126.5	14.1	5.0	3.0	38.6	22.8	10.3	10.5	2.2	27.0	323.9
Hours Boating					14.0									14.0
Miles Boating					14.0									14.0
Stationary Hours			4.0	10.0	5.1		4.0		1.4		6.5			31.0
Feeder Hours	4.0		6.2	11.0				8.3	2.0		9.0			40.5
Hours Owling			0.2	3.6				1.3	1.4		3.5		10.0	20.0
Miles Owling				5.0				1.8	0.6		12.0		50.0	69.4
Hours Other	4.0		1.0								1.5			6.5
Miles Other	16.0										0.5			16.5

There were two species that were write-ins to the distributed checklist for this count (Table 3). The two Brown Boobies (Figure 1) reported in Baltimore were the stars of the day. Their presence in Baltimore Harbor had been confirmed the previous day, which brought great numbers of birders to the site on 19 September 2015, the Fall Count date. An adult female and a sub-adult were observed perched on hawsers (heavy mooring ropes) between two docked ships, the SS *Denebola* and the SS *Antares*, and were also seen making brief flights. Many birders observed them via spotting scope from the Canton waterfront, about 0.5 mile from the birds. Many birders also employed water taxis or personal watercraft to obtain close views of the boobies, therefore the number of miles traveled by boat was unusually high (Table 2). The birds have been

extensively documented photographically, and at least one bird was still present into December 2015.

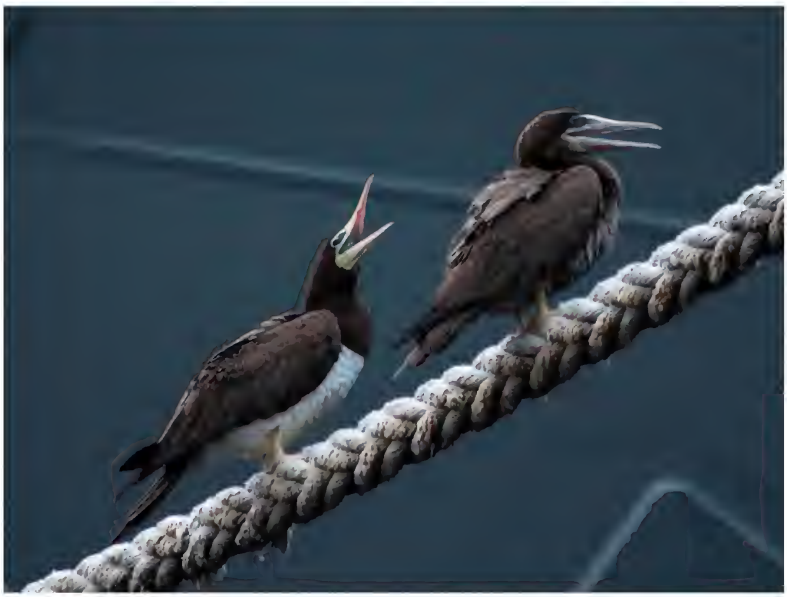

Figure 1. Adult female (left) and sub-adult Brown Boobies. Baltimore Harbor, Baltimore, Maryland, 19 September 2015 (photographed by Russ Ruffing).

The second write-in was the three Eared Grebes found at the Hurlock Wastewater Treatment Plant. This is the second record for this species on Dorchester Fall Counts. These birds had been observed several days before the count and continued to be seen for a couple days thereafter.

In addition, the following highlights were noted by compilers in their inputs. In Dorchester, the Wilson's Phalarope at Hurlock was a first record, the Olive-sided Flycatcher was a third record, and the Sedge Wren a first record for that count. In Kent, the Golden-winged Warbler and Connecticut Warbler were highlights along with a Summer Tanager and a pair of Red-headed Woodpeckers feeding fledglings at Eastern Neck National Wildlife Refuge. A calling (not seen) Willet in Prince George's County was accepted, as the observer is familiar with the call and the habitat was suitable, although it's appearance this far from the coast would be unusual. Brown Pelican sightings were high with 222 found in Dorchester.

Species with only a single individual found statewide included American Widgeon (Dorchester), Ruffed Grouse (Allegany), American White Pelican (Dorchester), Yellow-crowned Night-Heron (Prince George's), White Ibis (Dorchester), Black-bellied Plover (Kent), American Golden-Plover (Dorchester), Willet (Prince George's), Ruddy Turnstone (Dorchester), Stilt Sandpiper (Talbot), Wilson's Phalarope (Dorchester), Peregrine Falcon (Cecil), Olive-sided Flycatcher (Dorchester), Yellow-bellied Flycatcher (Carroll), Red-breasted Nuthatch (Caroline), Sedge Wren (Dorchester), Gray-cheeked Thrush (Talbot), Connecticut Warbler (Kent), Kentucky Warbler (Dorchester), Saltmarsh Sparrow (Dorchester), Lincoln's Sparrow (Baltimore), White-throated Sparrow (Carroll), and Boat-tailed Grackle (Dorchester).

There were 43 species that were observed in only one county. Twenty of these were observed in Dorchester County, with the next highest number being three each in Baltimore and Kent Counties. This reflects in part the excellent coverage in Dorchester but also is likely due to the absence of other reports from the Lower Eastern Shore. Seventeen species were reported for all 13 counts.

Thank you to all participants and especially the compilers. The 2016 counts will be held on 17 or 18 September. I hope that more participants will enjoy the experience and additional counties will have volunteers who choose to organize a count in the future.

Table 3. 2015 Maryland Fall Count: observed species.

Species	AL	WA	CA	HO	BA	HA	CE	PG	CT	KE	CN	TA	DO	Total
Canada Goose	28	69	719	1022	126	399	51	627	95	106	96	49	656	4043
Mute Swan						2								2
Wood Duck	23	8	7	15		2		150	23	19	25	32	62	366
American Wigeon													1	1
American Black Duck	10			2						1	4		48	65
Mallard	38	15	62	81	94	87	33	176	182	174	48	23	892	1905
Blue-winged Teal								2		8	2		17	29
Northern Shoveler	1							1					23	25
Northern Pintail										3	5			8
Green-winged Teal	2			1	5			43		72			29	152
Hooded Merganser									2					2
Ruddy Duck										2			9	11
Northern Bobwhite											3		17	20
Ruffed Grouse	1													1
Wild Turkey	49	57				2		2	5	10	36		24	185
Pied-billed Grebe			3	3				15					2	23
Eared Grebe													3	3
Brown Booby					2									2
Double-crested Cormorant				7	214	4	18	53	47	160	19		124	646
American White Pelican													1	1
Brown Pelican													222	222
Great Blue Heron	2	2		37	15	11	14	29	18	31	12	1	54	226
Great Egret			13	2	3	8	18	42			20	2	56	164

Species	AL	WA	CA	HO	BA	HA	CE	PG	CT	KE	CN	TA	DO	Total
Snowy Egret			1				2		54		1	12	89	159
Little Blue Heron					9									9
Tricolored Heron													4	4
Cattle Egret										9	1			10
Green Heron		1	4	8	3			2		2	3	2	2	27
Black-crowned Night-Heron				1	14			1	2	3			1	22
Yellow-crowned Night-Heron								1						1
White Ibis													1	1
Glossy Ibis											2			2
Black Vulture	12	5	27	139	15	4	29	48	46	31	99	2	43	500
Turkey Vulture	64	31	163	199	18	30	16	59	111	186	239	6	218	1340
Osprey	2		2	5	4	2	2	6	7	11	5	1	8	55
Bald Eagle	1	1		6	1	4	20	13	46	54	10	2	108	266
Northern Harrier								1		5	2		7	15
Sharp-shinned Hawk	3		1	4	1	1				7	1		10	28
Cooper's Hawk	1		5	7	1		1	5	2	2	2		10	36
unidentified Accipiter								2						2
Red-shouldered Hawk	12	2	7	48	5	3		9	2	3	6		2	99
Broad-winged Hawk	18		35	4	2		1							60
Red-tailed Hawk	9	5	19	17	4	3	1	5		4	8		13	88
unidentified Buteo								2						2
Clapper Rail													3	3
Virginia Rail													7	7
Sora								3					1	4
Common Gallinule													10	10
Black-bellied Plover										1				1
American Golden-Plover													1	1
Semipalmated Plover				1									11	12
Killdeer	41	2	13	66	3	1		30	3	9	26	2	27	223
Spotted Sandpiper				3	2	1		20			6		4	36
Solitary Sandpiper				2						1				3
Greater Yellowlegs										1		30	31	62
Willet								1						1
Lesser Yellowlegs				3	15			3	1	45		21	14	102
unidentified yellowlegs								2						2
Ruddy Turnstone													1	1
Stilt Sandpiper												1		1
Least Sandpiper				27	5			16		50		14	29	141
Pectoral Sandpiper	1			4								1	11	17
Semipalmated Sandpiper				4	3			2		23		26	17	75
Short-billed Dowitcher													5	5
Wilson's Snipe											6		5	11
American Woodcock	1										2			3
Wilson's Phalarope													1	1
Laughing Gull					754			218	993	446	4		1193	3608
Ring-billed Gull					37	11	37	183	220	120	160		98	866
Herring Gull					49				300	11			231	591
Great Black-backed Gull					19				1028	1			71	1119
unidentified gull					25						20			45
Caspian Tern					2			3		92			4	101
Common Tern					1				3	1			1	6
Forster's Tern								35	123	130	2		101	391
Royal Tern									76	4			35	115
Rock Pigeon	126	28	152	482	540	48	1	16	30	24	47		27	1521
Mourning Dove	23	62	157	298	47	60		267	60	37	220	2	136	1369
Yellow-billed Cuckoo	1		5	1	1				1				4	13
Eastern Screech-Owl		1	2	7				2	3		2		22	39
Great Horned Owl				2					1	1	6		19	29
Barred Owl		1	2	6		1			3	3	12		6	34
Common Nighthawk				4					1					5
Chimney Swift	26	9	81	168	66	2		15	8	100	394		23	892

Species	AL	WA	CA	HO	BA	HA	CE	PG	CT	KE	CN	TA	DO	Total
Ruby-throated Hummingbird	6	8	27	50	3	4		7	15	11	27		5	163
Belted Kingfisher	1	3	23	16	1	3	1	3	7	4	5	1	8	76
Red-headed Woodpecker			6	1		1			6	4			3	21
Red-bellied Woodpecker	27	23	79	211	11	13	1	54	40	18	33	2	19	531
Downy Woodpecker	15	16	64	119	9	10	1	43	37	18	26	1	57	416
Hairy Woodpecker	5	1	14	30	3	2		6	5	5	6	1	2	80
Northern Flicker	15	13	28	58	4			27	9	12	11		28	205
Pileated Woodpecker	13	13	14	43		1	1	11	10	4	18	2	18	148
American Kestrel	1		6	11		3	4	10	3	3	5		46	92
Merlin				1				1		1			1	4
Peregrine Falcon							1							1
Olive-sided Flycatcher													1	1
Eastern Wood-Pewee	4	2	28	57	6	5	3	19	16	12	18	1	18	189
Yellow-bellied Flycatcher			1											1
Acadian Flycatcher			1	2				2	5		2		1	13
Willow Flycatcher				2										2
Trail's Flycatcher										1			1	2
Least Flycatcher			1	1		2	1		1	2	1		1	10
unidentified *Empidonax*	1			10		4		3			1		4	23
Eastern Phoebe	6	4	34	50		4		15	14	4	11	2	2	146
Great Crested Flycatcher				3				1	1	1	6	1	5	18
Eastern Kingbird				2							2		1	5
White-eyed Vireo		1	3	15		2		5	13	6	6		23	74
Yellow-throated Vireo		1	1	1	1	1	1		1	1			1	9
Blue-headed Vireo	1			2					1				1	5
Warbling Vireo			1	2	1					1	2			7
Philadelphia Vireo			1	2	1					2				6
Red-eyed Vireo	3	1	10	19	8	3	2	4	9	16	4		13	92
Blue Jay	67	39	259	559	32	32	9	130	83	74	96	18	121	1519
American Crow	100	13	291	486	17	40	11	93	204	34	252	2	148	1691
Fish Crow		12	130	20	22	1	1	38	102	14	44		12	396
unidentified crow				109	2			153	23	4	26			317
Common Raven	17	8	1	1										27
Horned Lark	1		1	20							14			36
Tree Swallow		30		4			14		5	117	484	10	145	809
Northern Rough-winged Swallow			4							48	6	3	2	63
Barn Swallow				13						5	3		6	27
unidentified swallow										125				125
Carolina Chickadee		39	175	316	29	23	8	96	132	53	107	10	129	1117
Black-capped Chickadee	65													65
Tufted Titmouse	48	23	117	228	9	18	2	64	115	30	68	7	64	793
Red-breasted Nuthatch											1			1
White-breasted Nuthatch	33	18	56	120	11	10	4	30	24	9	12			327
Brown-headed Nuthatch									6	3		1	100	110
Brown Creeper				1							1			2
House Wren	1	1	10	58	8	3		2	4	15		1	22	125
Sedge Wren													1	1
Marsh Wren													12	12
Carolina Wren	21	31	90	233	12	8	6	92	74	21	48	1	72	709
Blue-gray Gnatcatcher			5	18	3	3	1	2	4	8			26	70
Ruby-crowned Kinglet			1	1		1							2	5
Eastern Bluebird	37	14	83	154	1	36		46	26	60	70	4	43	574
Veery				3					5	1				9
Gray-cheeked Thrush												1		1
Swainson's Thrush	1			1				2	1	1	1		1	8
Hermit Thrush		1									5			6
Wood Thrush			3	21	2			2	9	3	4			44
American Robin	4	15	83	231	184	32		164	20	26	75	2	85	921
Gray Catbird	12	12	225	449	45	32	1	47	25	28	13	8	44	941
Brown Thrasher	1	2	14	13		2		4	6	4	5	1	5	57
Northern Mockingbird	6	4	70	99	9	7	6	20	22	22	59		50	374

Species	AL	WA	CA	HO	BA	HA	CE	PG	CT	KE	CN	TA	DO	Total
European Starling	174	358	520	752	273	47	95	1146	307	460	1080	3	646	5861
Cedar Waxwing	57	35	42	177	5	16	1	33	4	101	12	7	3	493
Ovenbird			2	2	1			1	1			1	3	11
Northern Waterthrush			1								1	1		3
Golden-winged Warbler										1				1
Blue-winged Warbler										1		1	2	4
Black-and-white Warbler	3		8	12	2	2	1	4	1	11	8	3	23	78
Prothonotary Warbler		2												2
Tennessee Warbler	1		2	1						8				12
Nashville Warbler			1					1	1					3
Connecticut Warbler										1				1
Kentucky Warbler													1	1
Common Yellowthroat	6		16	121	8	12		8	45	35	5	4	67	327
Hooded Warbler	1			1				1		1				4
American Redstart	1		2	39	9	2		13	11	31	19	1	35	163
Cape May Warbler			5	3				1						9
Northern Parula	1		1	3	3	1	1	2	4	6	2		10	34
Magnolia Warbler	4	3	3	40	2	5		7	3	4		2	9	82
Bay-breasted Warbler	3			1			1							5
Blackburnian Warbler				2									1	3
Yellow Warbler		2					1				3	1	8	15
Chestnut-sided Warbler				7	1			2		2			4	16
Blackpoll Warbler	3		1	1		1				1				7
Black-throated Blue Warbler				2	1			1		3	1		1	9
Palm Warbler			2	2				2	2					8
Pine Warbler	1	1	1	2	1		1	2	9	13	10		90	131
Yellow-rumped Warbler							2		3		5			10
Yellow-throated Warbler		1		1										2
Prairie Warbler	1								1				3	5
Black-throated Green Warbler	5		12	8	1	1		3		5				35
Canada Warbler	1			4										5
Yellow-breasted Chat				2					2		1		1	6
unidentified warbler				10							2			12
Eastern Towhee	8	5	15	47	2			2	13	8	3		4	107
Chipping Sparrow	57	4	43	135		32		29	22	47	117		69	555
Field Sparrow	1	2	16	4	3	2				4	6		2	40
Savannah Sparrow			1	3									11	15
Saltmarsh Sparrow													1	1
Seaside Sparrow													14	14
Song Sparrow	14	2	37	57	3	3		4	8		3		8	139
Lincoln's Sparrow					1									1
Swamp Sparrow			1	1					1				2	5
White-throated Sparrow			1											1
unidentified sparrow		4												4
Summer Tanager									7	1	2	1	5	16
Scarlet Tanager	2		6	8	2	1		3	1	7		1	4	35
Northern Cardinal	47	42	155	432	15	54	7	119	129	121	83	4	79	1287
Rose-breasted Grosbeak	2	1	3	11	1		2		1	1				22
Blue Grosbeak				3	1			10	5	28	14	1	39	101
Indigo Bunting			9	92		3		18	51	40		2	18	233
Bobolink				3						2			367	372
Red-winged Blackbird			183	5	5	23		664	103	83	67	4	2026	3163
Eastern Meadowlark				7						3	2			12
Common Grackle	1	250	5	12	4	3		950	68	139	325	5	1250	3012
Boat-tailed Grackle													1	1
Brown-headed Cowbird		20	36	223		70		247	250	90	56		157	1149
Baltimore Oriole				1				1					3	5
House Finch	11	16	65	79	3	30		31	20	5	23		5	288
American Goldfinch	98	30	168	373	25	45	6	48	73	72	41	8	71	1058
House Sparrow	28	11	141	250	83	29		162	141	45	230		53	1173

"Wood Thrush" by Ellen Lawler

A monochromatic watercolor painted in March 2010. The painting is based on a photo Ellen took in her Salisbury, Maryland backyard in fall 2008.

MARYLAND BIRDLIFE

NOTICE TO CONTRIBUTORS

Contributors should prepare manuscripts according to the following instructions.

Title: The title should be brief, concise, and pertinent.

Abstract: An abstract is required for all long articles; suggested for all biologic studies more than two (2) pages in length; but is not needed for notes, distribution reports, or short observations (especially if two pages or shorter in length). The abstract should provide a capsule description of the main thrust, methods and essential findings of the article. It should contain the scientific name of the main subject species.

Text: Manuscripts should be double-spaced, lines numbered, and submitted in MS Word™ by e-mail or on a CD. Please identify respective file name(s) for text, figure titles, and descriptions of graphs or figures. First mention of a biological organism, in the abstract and text should include the full scientific name in italics. Carefully check the spelling of all scientific names. Capitalize the first letter of each word comprising the "official" common name for faunal species. Short articles and general notes (20 pages or less) are preferred. Color "copy ready" illustrations, pictures, or digital images are preferred.

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Tables: Tables, graphs and line drawings should be created electronically in black and white. Color should only be used when absolutely necessary for clarity.

Illustrations: Photographs or high-definition images may be accepted if necessary or desired by the author(s) to support the text. Photographs should be submitted in color. Figure numbers, as cited in the text, and figure legends should be keyed to each respective photograph.

Maryland Birdlife is published twice annually to record and encourage the study of birds in and around Maryland. ***Maryland Birdlife*** contains original articles, notes, and research papers primarily pertaining to Maryland and the Mid-Atlantic region. Potential topics may include geographic or temporal distribution, ecology, biology, morphology, systematics, behavior, migration, life history, as well as other biological topics. Annual bird counts also will be published. All submissions are subject to editorial review and acceptance. Articles and research papers will be peer-reviewed. Send submissions to the Editor: Eugene J. Scarpulla, 14207 Lakerun Court, Bowie, MD 20720-4861, ejscarp@comcast.net.

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CONTENTS – SPRING 2016

Editor's Note
Eugene J. Scarpulla 1
Fall Migration of Sharp-shinned Hawks (*Accipiter striatus*), Broad-winged Hawks (*Buteo platypterus*), and Red-tailed Hawks (*Buteo jamaicensis*) at Washington Monument State Park, Washington County, Maryland
Ronald R. Runkles 2
Maryland's First Record of Snowy Plover, *Charadrius nivosus*
Jeffrey L. Culler, Kevin G. Graff, Joseph C. Hanfman, Jr., & Robert F. Ringler 10
Chimney Swift (*Chaetura pelagica*) South Transient Roost Staging and Timing on the Central Chesapeake Bay Coastal Plain
Jan G. Reese 16
Transmission Tower Nesting by American Kestrels (*Falco sparverius*) within a Suburban Corridor
David R. Smith 26
2015 Maryland May Count
Michael J. Welch 31
2015 Maryland Fall Count
Charles R. Stirrat 37
Featured Artwork
Ellen M. Lawler 36, 44

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Cover: "Peregrine at Craighill Lighthouse" by Diane Ford. Acrylic and gouache, painted on 30 December 2014 from sketches made at Hart-Miller Island, Baltimore County, Maryland that same month.

Maryland Birdlife 65(2):1-3

EDITOR'S NOTE

Posthumous Manuscripts

This issue of *Maryland Birdlife* features several submittals from the 1980s. I came in possession of an old folder of submitted manuscripts; some had already been published, some had not. After looking through the folder, I became aware that several of the unpublished ones contained historical documentation of past events. I am publishing five in this issue. Three of the five are being published posthumously. Our departed authors are Eirik A. T. Blom (Harford County, MD) (Figure 1), Edward D. Fingerhood (Philadelphia, PA) (Figure 2), and M. Brooke Meanley, Jr. (Prince Georges County, MD) (Figure 3). *Maryland Birdlife* honors the memory of these three authors. [*See the following two pages for photos and additional information.*]

New Statewide Mid-winter Count Compiler

It is my pleasure to introduce Mary Anne Fluke as the Maryland Ornithological Society's new statewide Mid-winter Count Compiler. Her interest with birding started with hummingbirds. Watching the hummingbirds in her garden fascinated Mary Anne. Looking through a birding magazine, she came across an ad for a trip to Southeast Arizona for the spring hummingbird migration through the desert. After seeing many new hummingbird species and another 90+ bird species, she was hooked. She joined the Baltimore Bird Club (BBC) in 2009 and since then has attended many of the walks and outings that are offered. It was then that she was introduced to the wealth of birdlife here in this area. Mary Anne has found that since she started birding, it has led her into other outside interests such as hiking, nature photography, and gardening. She presently leads several bird walks a year, her favorite places being Susquehanna State Park, Cromwell Valley Park, and North Point State Park. For the past two years, Mary Anne has been the Recording Secretary for the BBC and has been an MOS Director since last year.

Peer Reviewers

Associate Editor Mark Johnson and I thank all of the peer reviewers of the four 2015 and 2016 issues. Mark has compiled their names in a note at the end of this issue. These impressive reviewers greatly enhanced the quality of *Maryland Birdlife*.

Eugene J. Scarpulla
Editor
ejscarp@comcast.net

Figure 1. Eirik A. T. Blom. Photographed by Bill Thompson, III (Editor and Co-Publisher, *Bird Watcher's Digest*) at Bill's farm in Whipple, Ohio, circa 1999-2000.

Figure 2. Edward D. Fingerhood. 1990 World Series of Birding (19 May 1990) DVOC "B Team". Left to right: Chris Walters (Captain), Sandy Sherman, Ed Fingerhood, Erica Brendel, and Keith Russell. Photographed by Chris Walters. (Photo courtesy of Bert Filemyr, Treasurer, DVOC)

Figure 3. M. Brooke Meanley, Jr. Accessed at: http://www.pwrc.usgs.gov/resshow/perry/bios/MeanleyBrooke.htm. (Photo courtesy of USGS Patuxent Wildlife Research Center)

Eirik A. T. Blom (Harford County, MD) – 1947-2002
Rick had many accomplishments: Project Coordinator for the *Atlas of the Breeding Birds of Maryland and the District of Columbia*, Co-Chief Consultant for the *National Geographic Society Field Guide to the Birds of North America* (1st and 2nd Editions), Editor of *Birding* (American Birding Association), Mid Atlantic Region Co-Editor for *American Birds*, Contributing Editor for *Bird Watcher's Digest*, and Adjunct Faculty at The Johns Hopkins University where he taught continuing education bird watching courses. [*Editor's Note: Rick was my closest friend. I think of him often and miss our many days gull watching at Conowingo Dam, landfills, and wastewater treatment plants.*]

Edward D. Fingerhood (Philadelphia, PA) – 1937-1998
Ed Fingerhood was responsible for the *Atlas of Breeding Birds of Pennsylvania*. He was the first project coordinator and a member of the planning committee. The project not only created the atlas, but along with the founding of *Pennsylvania Birds*, created the organizational framework for the founding of the Pennsylvania Society for Ornithology (PSO 2011). Ed was a fellow and life member of the Delaware Valley Ornithological Club (DVOC). He held various positions including Councillor, editor of *Cassinia* and the DVOC newsletter, and member on the Bylaws and Archives committees. Ed served as chairman of the Ornithological Studies committee. He stressed that races, subspecies, and forms should be studied and reported as much as "full" species. It was this kind of detail that epitomized Ed's approach to birding (Sherman 1998).

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M. Brooke Meanley, Jr. (Prince Georges County, MD) – 1915-2007
Brooke worked for the Division of Birds at the U.S. National Museum (1949-1950), the Wildlife Research Laboratory, U.S. Fish and Wildlife Service, at Denver, Colorado (1950-1957), and the Patuxent Wildlife Research Center (PWRC) in Laurel, Maryland (1957-1977). He published numerous articles on the distribution, migration, ecology, and management of blackbirds in relation to damage of agricultural crops. He is credited with helping to design a very effective decoy trap used to capture blackbirds for banding. Brooke published more than 125 articles about his research and natural history. He published many books including *Natural History of the King Rail*; *Natural History of the Swainson's Warbler*; *Swamps, River Bottoms, and Canebrakes*; *Birds and Marshes of the Chesapeake Bay Country*; *Blackwater*; *Birdlife at Chincoteague*; *Waterfowl of the Chesapeake Bay Country*; *The Patuxent River Wild Rice Marsh*; *Notes on Southern Marshes, Swamps, and Pineywoods*; and *Notes on Dismal Swamp Plants*. (Information gleaned from PWRC 2008)

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Maryland Birdlife 65(2):4-9

Peregrine Falcon (*Falco peregrinus*) Prey Items Found outside a State Office Building Complex in Baltimore, Maryland, August 1982 to March 1983

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In the fall of 1982, I routinely checked the sidewalks around the building in which I worked for dead birds from window collisions. This was at the Herbert R. O'Conor State Office Building at 201 W. Preston Street, Baltimore, Maryland. In the course of retrieving the dead birds, I started noticing parts of birds. I wondered if rodents were getting to the birds before I arrived until I saw a Peregrine Falcon (*Falco peregrinus*) in the vicinity. If indeed it was the falcon catching some birds and leaving parts behind, I decided it would be interesting to know what it was eating. The bird appeared to be an adult male Peregrine Falcon, presumably the one known as "Ashley" (Therres et al. 1993) from the nesting pair on the USF&G building (currently Transamerica Tower) located at 100 Light Street in downtown Baltimore, approximately 1 mi (1.6 km) to the south. Ashley's primary roost site was on the northwest corner of the State Office Building at 301 W. Preston Street, on the corner of N. Eutaw and W. Preston Streets. The bird perched high, approximately 12 stories up, with its back to W. Preston Street. The presence of a substantial scattering of fecal matter on the sidewalk below attested to this. I sometimes saw the bird flying around the buildings, perched on other floors, or on the O'Conor Building.

METHODS

Each day before starting work at 8:00 a.m., I walked around the O'Conor Building searching for dead birds. Depending on the arrival time of my carpool, I spent 5 to 20 minutes looking for/at the remains. Occasionally, I went into work first to get things started, and then came back outside to look for remains. Observation times varied according to the amount of remains I found. I made note of the parts of birds that I found, as well as the species identification. After realizing the presence of the Peregrine Falcon, I expanded my search to the State Office Building at 301 W. Preston Street. I continued this routine through the fall migration season and briefly in the following spring of 1983 until the Peregrine was no longer seen.

RESULTS

In total, 26 dead bird or parts of these birds were found between 25 August 1982 and 15 March 1983. These represented 12 different species and one unknown warbler. Table 1 shows a list of the bird parts I found around the buildings and the identifications I made at the time. In most cases, these would be wings or heads that had been removed before the remainder was eaten. Northern Flicker comprised 23.1% (n = 6) of the birds killed by Ashley. In the case of one Northern Flicker found on 1 October 1982, the carcass was intact on its back with the entire breast and internal parts having been neatly removed. The second most frequent prey was Rock Pigeon which accounted for 19.2% (n = 5) of the birds killed.

Table 1. Bird parts found outside the Maryland State Office Building complex at 201 and 301 W. Preston Street, Baltimore, Maryland between 25 August 1982 and 15 March 1983).

Date	Common Name	Scientific Name	Body Part
25 August 1982	Yellow-billed Cuckoo	*Coccyzus americanus*	1 wing, part of tail
26 August 1982	Sora	*Porzana carolina*	head, other small remains
26 August 1982	Rock Pigeon	*Columba livia*	wings, feet, other small parts
27 August 1982	Rock Pigeon	*Columba livia*	wings, feet, sternum, tail (all in one piece)
30 August 1982	Rock Pigeon	*Columba livia*	head
1 September 1982	Yellow-breasted Chat	*Icteria virens*	head
7 September 1982	Bay-breasted Warbler	*Setophaga castanea*	head
17 September 1982	Rose-breasted Grosbeak	*Pheucticus ludovicianus*	head, 1 wing of ♂
21 September 1982	Northern Flicker	*Colaptes auratus*	1 wing
25 September 1982	Rose-breasted Grosbeak	*Pheucticus ludovicianus*	head
28 September 1982	Rose-breasted Grosbeak	*Pheucticus ludovicianus*	head
28 September 1982	Ovenbird (?)	*Seiurus aurocapilla* (?)	1 wing
29 September 1982	Northern Flicker	*Colaptes auratus*	head of ♂
1 October 1982	Northern Flicker	*Colaptes auratus*	head
1 October 1982	Northern Flicker	*Colaptes auratus*	carcass
4 October 1982	Northern Flicker	*Colaptes auratus*	wings, bones, 1 leg
6 October 1982	Rock Pigeon	*Columba livia*	feathers
13 October 1982	Northern Flicker	*Colaptes auratus*	1 wing
19 October 1982	Rose-breasted Grosbeak	*Pheucticus ludovicianus*	head, part of 1 wing of ♂
8 November 1982	Eastern Meadowlark	*Sturnella magna*	entire body with some breast feathers gone
8 November 1982	American Robin	*Turdus migratorius*	head
8 November 1982	American Robin	*Turdus migratorius*	head
12 November 1982	unknown warbler	Family Parulidae	wing
16 November 1982	Eastern Meadowlark	*Sturnella magna*	head
14 March 1983	Rock Pigeon	*Columba livia*	miscellaneous parts
15 March 1983	American Woodcock	*Scolopax minor*	head

DISCUSSION

Ashley

My observations of bird parts at the Maryland State Office Building complex occurred from August to November 1982 and in March 1983. These observations coincided with the presence of Ashley in Baltimore (Therres et al. 1993) (Table 2). Ashley was banded (#816-09555) on 19 March 1982. Banding records state that this Peregrine was a third-year bird, was hand-raised, and wore a transmitter (Danny Bystrak, in litt. 18 August 2016). In 1982, Ashley was transported to Baltimore's USF&G building from The Peregrine Fund laboratory. [Note: Cade (2003) incorrectly reports the release date as 1983.] In December 1982, Ashley was wounded by a shotgun blast. After a rehabilitation period, the bird was released in February 1983 back at the USF&G building. On 18 April 1983, Ashley was found dead by a maintenance worker on the Francis Scott Key Bridge over the Patapsco River. Death was due to vehicle impact on the roadway of the bridge (Glenn D. Therres, in litt. 17 August 2016).

Table 2. Timeline detailing Ashley's presence in Baltimore and the presence of prey items found outside the State Office Building complex at 201 and 301 W. Preston Street, Baltimore, Maryland (25 August 1982-15 March 1983).

Month	Ashley's Presence in Baltimore	Prey Item Presence at Office Building Complex
Pre-August 1982	Released at USF&G building	
August 1982	Free flying	Yes
September 1982	Free flying	Yes
October 1982	Free flying	Yes
November 1982	Free flying	Yes
December 1982	Found shot	
January 1983	In rehabilitation	
February 1983	Released at USF&G building	
March 1983	Free flying	Yes
April 1983	Found dead	

Prey Items

The list of observed bird parts (Table 1) shows a varied diet including a rail, a shorebird, and less-aquatic passerines and non-passerines. Bent (1938) lists a wide range of prey for Peregrine Falcons and states: "Probably the very largest and the very smallest birds on this list [Bent's list] are less often taken than those of intermediate size; pigeons, flickers, jays, meadowlarks, and other birds of similar size probably constitute the bulk of the food in inland localities . . ."

Because Northern Flickers were frequently taken, one can imagine the target a flicker's white rump would make for a Peregrine Falcon circling above. Because only 11.5% (N = 3) of the total birds taken (n = 26) were small warblers, it seems that Ashley preferred the larger-bodied migrants that were passing the buildings. There were few Rock Pigeons in the W. Preston Street area and it appears that Ashley cleared out most of these early in his residence here. Being an opportunist, an urban Peregrine Falcon can take whatever prey comes its way.

In other studies of urban Peregrine Falcons, Rock Pigeons were a predominant prey item. In a study of a nesting pair in Warsaw, Poland, Rejt (2001) found that 32% of their prey were Rock Pigeons. Rejt also documented seasonal differences in the percentages of pigeons in their diet (19.4% in spring, 50% in summer, 22.7% in autumn, and 51.5% in winter). During the spring and fall, migrant species were more prevalent in the Peregrines' diet. A study of a single pair of non-breeding (i.e., outside the breeding season) urban Peregrines in Florence, Italy found 30.4% of their prey to be Rock Pigeons (Serra et al. 2001). At an urban location in Kentucky, Rock Pigeons made up 75.4% (n = 46, N = 61) of the prey of Peregrines (Carter et al. 2003). Rock Pigeons comprised 41.9% (n = 2208, N = 5275) of prey of urban-dwelling Peregrines in a ten-year study in Bristol, Bath, and Exeter in southwest England (Drewitt and Dixon. 2008).

For almost 20 years, John Barber worked at Baltimore's USF&G building as "caretaker" for their nesting Peregrine Falcons (Barber 2003). His studies and publications (Barber 1989 [interspecific aggression], 1992 [prey]; Barber and Barber 1983 [prey], 1988 [prey]) furthered the knowledge about urban Peregrines. Several of his publications are pertinent to this paper. Barber and Barber (1983) reported on the prey of the USF&G female Peregrine named "Scarlett." Of 304 prey items, 91.1% (n = 277) were Rock Pigeons, followed by Northern Flickers (2.9%, n = 8). In my survey of 26 prey items, Northern Flickers and Rock Pigeons were the most numerous, 23.1% and 19.2% respectively. On one occasion, Barber and Barber (1983) observed Scarlett feeding on a window-killed American Woodcock. This behavior was a possibility in my survey but was never observed. On several occasions, Scarlett was known to feed several miles from the USF&G building (Barber and Barber 1983), so it is no surprise that Ashley would feed a mile from the nest site. A follow-up article by Barber and Barber (1988) of a subsequent pair of Peregrines at the USF&G building, showed that of the 472 prey items, the top five species were Rock Pigeons (31.4%, n = 148), Mourning Doves (*Zenaida macroura*; 15.3%, n = 72), European Starlings (*Sturnus vulgaris*; 11.2%, n = 53), Blue Jays (*Cyanocitta cristata*; 7.6%, n = 36), and Northern Flickers (5.7%, n = 27). In my survey, only two of the top five Barber and Barber (1988) prey species were observed—Rock Pigeon and Northern Flicker. In all three surveys, these two

species were a prominent prey item. Additionally in a non-urban Maryland setting, Northern Flickers comprised 32.4% (n = 35, N = 108) of the prey of fall migrant Peregrine Falcons during a twelve-year survey at Assateague Island (Ward and Laybourne 1985). Interestingly, 91.4% of those flickers (n = 32) were taken by immature Peregrines.

ACKNOWLEDGMENTS

I thank Glenn D. Therres (Associate Director, Wildlife and Heritage Service, Maryland Department of Natural Resources, Annapolis, MD) and Danny Bystrak (Wildlife Biologist, Bird Banding Laboratory, Patuxent Wildlife Research Center, United States Geological Service, Department of the Interior, Laurel, MD) for providing banding information and historical data regarding Ashley. I also thank Jamie Holfeltz (Research Library Coordinator, The Peregrine Fund, Boise, ID) for providing pertinent information from Barber (2003) and Cade (2003).

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Field Sketch of a Peregrine Falcon by Diane Ford

Drawn at the Governor Thomas Johnson Memorial Bridge on 17 May 2014. Maryland Ornithological Society Annual Conference, Solomons, Maryland. When the field trip arrived at the bridge, there was a nest high up under the span. A few seconds later, an adult Peregrine Falcon flew in and perched on the nest. The mate within the nest stood up and they exchanged places.

Maryland Birdlife 65(2):10-13

Waterbirds at Liberty Reservoir, 1985

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During the spring of 1985, the water level at Liberty Reservoir, on the border of Baltimore and Carroll Counties, was low by several feet. This allowed shorebirds to find exposed mudflats at the upper extremities of the reservoir. With drought conditions prevailing during most of the year, the water level dropped continuously, providing fresh mudflats to replace those which had become overgrown with vegetation. By far, the best mudflat was created at the confluence of Beaver Run and the reservoir in Carroll County, about 1.5 mi (2.4 km) south of Finksburg near a new housing development called Cold Saturday.

METHODS

I visited this particular section of the reservoir 31 times from March to December and recorded the numbers of all waterbird species I observed. These are summarized in the annotated list that follows. Because of the unusual nature of the habitat, several species new or rarely seen in Carroll County were recorded. The actual dates I visited the reservoir are listed in Table 1.

Table 1. Waterbird monitoring dates at the confluence of Beaver Run and Liberty Reservoir, Carroll County, Maryland, 1985.

Month	Monitoring Date
March	25
April	6, 14, 21
May	5, 8, 10, 12, 19, 22, 29
June	(none)
July	14, 27, 28
August	19, 20, 22, 25, 26, 30
September	13, 21, 22, 29
October	6, 20
November	9, 17, 24
December	8, 15

Other observers who visited the reservoir with me included Alex and Helene Hammer on 27 July, Rick Blom on 25 August, and Jim Wilkinson on 26 August. Harvey and Marion Mudd made several independent visits. All observations listed below are my own or ones made with the observers. Additional reports from the Mudds, in which I did not participate, follow the annotated list.

ANNOTATED LIST OF THE WATERBIRDS OF LIBERTY RESERVOIR IN 1985

Canada Goose (*Branta canadensis*) – seen periodically throughout the year. Several pairs nested around the reservoir and the flock of 105 birds seen on 13 September was probably composed of these plus others that nested on nearby farm ponds.

Wood Duck (*Aix sponsa*) – seen only during the spring with a high of 6 on 22 May.

American Black Duck (*Anas rubripes*) – 1 on 20 October

Mallard (*Anas platyrhynchos*) – nest around the lake and could be seen at any time. The high count was 11 on 14 July.

Blue-winged Teal (*Anas discors*) – 10 on 6 April, 3 on 19 August, and 1 on 26 August.

Green-winged Teal (*Anas crecca*) – 2 on 25 March and 6 on 20 October.

Great Blue Heron (*Ardea herodias*) – 1 on 5 May was the only spring observation, but birds were present on most of the summer and fall trips with a high of 7 on 26 August.

Snowy Egret (*Egretta thula*) – 1 on 19-25 August.

Little Blue Heron (*Egretta caerulea*) – 1 immature on 28 July.

Tricolored Heron (*Egretta tricolor*) – 1 on 22-25 August was first discovered by Blom. This was a new species for Carroll County and only the fifth inland record in Maryland.

Green Heron (*Butorides virescens*) – seen 14 July-30 August, with 3 on 25 August.

Black-bellied Plover (*Pluvialis squatarola*) – 1 bird in breeding plumage on 19 August was only the second Carroll County record.

American Golden-Plover (*Pluvialis dominica*) – 3 on 13 September, 1 on 21 September, and 2 on 22 September were collectively the fourth Carroll County record (three previous records).

Semipalmated Plover (*Charadrius semipalmatus*) – a fairly common migrant with observations on 10-22 May in the spring including 13 on 12 May. Observed on 27 July-6 October in the fall with a high of 5 during the period 19-30 August.

Killdeer (*Charadrius vociferus*) – seen on all but one visit with seasonal highs of 10 on 10 May, 33 on 14 July, and 105 on 17 November.

Spotted Sandpiper (*Actitis macularius*) – a common visitor 5-29 May, with 20 on 10 May; and 14 July-22 September, with 6 on 28 July.

Solitary Sandpiper (*Tringa solitaria*) – a common visitor 5-19 May, with 28 on 8 May; and 14 July-22 September, with 17 on 27 July.

Greater Yellowlegs (*Tringa melanoleuca*) – 3 on 21 April were the only spring birds. In fall, 1 or 2 birds were seen 14 July-19 August; then none were present until 1 on 6 October and 4 on 20 October.

Willet (*Tringa semipalmata*) – Blom and I watched 11 of these birds drop onto the mudflats during a light rain on 25 August. We provisionally identified them as being of the "Western" subspecies (*T. s. inornatus*) on the basis of their large size, coloration, and gull-like calls. This was the second Carroll County record for both the species and subspecies.

Lesser Yellowlegs (*Tringa flavipes*) – a common visitor 5-19 May, with 15 seen on 8 and 10 May; and 27 July-20 October, with 60 on 25 August.

Red Knot (*Calidris canutus*) – 1 in breeding plumage on 19 August was not only a first for Carroll County, but the first inland record for Maryland.

Stilt Sandpiper (*Calidris himantopus*) – another feature of the rainy 25 August visit was a flock of 10, the second record for Carroll County.

Sanderling (*Calidris alba*) – 1 on 27 July, 1 on 22 August, and 3 on 21 September.

Dunlin (*Calidris alpina*) – 3 on 20 October.

Baird's Sandpiper (*Calidris bairdii*) – 1 on 25-26 August was the second Carroll County record.

Least Sandpiper (*Calidris minutilla*) – a common visitor 21 April-29 May, with 40 on 12 May; and 14 July-8 December, with 40 on 20 August. The last bird, which was present from 17 November, was the latest for the Maryland Piedmont and disappeared only when the reservoir began to freeze.

White-rumped Sandpiper (*Calidris fuscicollis*) – 9 on 22 May (the first spring record for Carroll County) and 9 on 29 September.

Buff-breasted Sandpiper (*Calidris subruficollis*) – Harvey Mudd discovered this bird on 22 September, another Carroll County first. After receiving a call from Harvey, I observed the bird later that day.

Pectoral Sandpiper (*Calidris melanotos*) – common 27 July-20 October, with 25 on 26 August and 29 September.

Semipalmated Sandpiper (*Calidris pusilla*) – a fairly common visitor 19-29 May, with 7 on the latter date; and 27 July-13 September, with 15 on 26 August.

Western Sandpiper (*Calidris mauri*) – 1 on 27 July was, unexpectedly, the only observation.

Short-billed Dowitcher (*Limnodromus griseus*) – 5 on 27 July and 19 August, 1 on 22-26 August.

Wilson's Snipe (*Gallinago delicata*) – 30 feeding in the open at the edge of the reservoir on 25 March was the largest flock reported in Carroll County at the time. Otherwise, there were single birds on 21 April, 5 May, and 9 and 17 November; and 5 on 8 December.

Ring-billed Gull (*Larus delawarensis*) – 1 on 14 April; and regular 21 September-15 December, with a high of 23 on the latter date.
Herring Gull (*Larus argentatus*) – 3 on 6 October, 2 on 9 November, 65 on 8 December, and 10 on 15 December.

Harvey and Marion Mudd also found two additional waterbird species:
Double-crested Cormorant (*Phalacrocorax auritus*) – 1 on 22 September.
Long-billed Dowitcher (*Limnodromus scolopaceus*) – 1 on 13 October, the second Carroll County record.

DISCUSSION

All of this points out the opportunistic nature of the birds and their capacity to utilize manmade opportunities to feed or rest during migration. Many of these birds would never have been seen in the Maryland Piedmont without the creation of a special piece of habitat. Judging by the frequency and abundance of each species, we can estimate which species regularly migrate overland through the region and which are less likely to do so.

I encourage other observers to make similar studies of local areas which present the opportunity to observe a variety of species throughout the migration period. This is not the first such article in *Maryland Birdlife* to document periodic visits to one birding locale. Other examples include Waterfowl Populations at Loch Raven Reservoir, March-April, 1964 (Kaestner 1964), Migrating Waterfowl at Triadelphia Reservoir, 1964 (Warfield 1965b), Migrating Waterfowl at Seneca (Warfield 1965a), Shorebird Concentration at Baltimore's Lake Montebello (Kaestner 1971), and Waterbirds on a Baltimore City Reservoir (Ringler 1978).

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Maryland Birdlife 65(2):14-17

Gull Concentrations at Alpha Ridge Landfill, Howard County, Maryland, Winter 1982-1983

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At the time of the tally for the 1982 Liberty Reservoir Christmas Bird Count (CBC), we were theorizing on the source of the gulls appearing on Liberty Reservoir in the evening at the end of each day during this time of the year. Someone suggested that the source might be the Alpha Ridge Landfill near Marriottsville, Howard County, Maryland. The site of the landfill is approximately 8 mi [12.9 km] south of the area of the reservoir where the gulls congregate in the evening.

Two days later, on 20 December 1982, we investigated the landfill and obtained permission to count the gulls while refuse was being dumped. There were about 3000 gulls actively feeding close to the dumping operation or resting on the ground. We estimated 2500 Herring Gulls (*Larus argentatus*) and 500 Ring-billed Gulls (*L. delawarensis*), one of which had an orange wing tag and metal bands on both legs. We immediately noticed about 10 Great Black-backed Gulls (*L. marinus*) in a variety of plumages. There were only four previous records of this species for Howard County.

Realizing that some of the rarer species were likely to be present in a flock of this size, and having seen some on the Liberty CBC, we started scanning carefully. Among the flock, we found 4 Lesser Black-backed Gulls (*L. fuscus*), 2 adults and 2 third-winter birds; 2 first-winter Iceland Gulls (*L. glaucoides*); and a first-winter Thayer's Gull (*L. thayeri*). These three species were all new Howard County records. Ringler immediately set up the camera to record the presence of these birds.

The Thayer's Gull (Figure 1) was the most cooperative of the rare birds and came to an icy pool beside the road, less than 50 ft (15 m) from our observation point. It was joined by one of the Iceland Gulls (Figure 2), allowing close comparison of these species with the more numerous Herring Gulls. The Iceland Gull was extremely white in plumage with an all-black bill. The other Iceland Gull was differentiated by having flecks of yellow on the otherwise black bill.

Figure 1. Howard County's first Thayer's Gull (*Larus thayeri*). Bottom photo: showing spread wings. Alpha Ridge Landfill, 20 December 1982.

Figure 2. Howard County's first Iceland Gull (*Larus glaucoides*). Alpha Ridge Landfill, 20 December 1982.

Figure 3. Howard County's first Glaucous Gull (*Larus hyperboreus*). Alpha Ridge Landfill, 24 December 1982.

On 24 December 1982, we returned to the landfill and found a flock composed of Ring-billed and Herring Gulls with 40 Great Black-backed Gulls and 1 each of Thayer's, Lesser Black-backed, and Iceland Gulls, plus 1 Glaucous Gull (*L. hyperboreus*) (Figure 3), the latter another Howard County first. The Thayer's, Iceland, and Glaucous Gulls were all in first-winter plumage. Something flushed a large number of the birds over the hill and we decided to try to relocate them in the surrounding fields. We spotted a flock of about 100 Ring-billed Gulls on Sand Hill Road opposite Crestlawn Cemetery. With them was the Iceland Gull. We found another larger flock near a farm on the south side of Old Frederick Road (MD Route 99) about 0.5 mi (0.8 km) west of the intersection with Sykesville Road (MD Route 32). In this flock, we found the Thayer's Gull. These birds flushed and many of them, including the Thayer's, flew across the road and landed in another field on the north side.

On 14 January 1983, Ringler returned to the landfill with David Holmes. In addition to the 1200 Herring Gulls and 300 Ring-billed Gulls, we saw 15 Great Black-backed, 2 Glaucous, and 2 Iceland Gulls. All the white-winged gulls were in first-winter plumage. One of the Iceland Gulls was a bird that we had not seen before, being more darkly marked than either of the previous birds.

Ringler again visited the landfill on 15 January 1983 with Jo Solem and Martha Chestem. Our count this day was 10 Great Black-backed, 1 Glaucous, and 3 Iceland Gulls along with the Herring and Ring-billed Gulls. The 3 Iceland Gulls appeared to be the same birds observed during the previous visits. In addition, a bird which may have been a hybrid Herring x Great Black-backed Gull was seen and photographed.

On 28 January 1983, Ringler returned with Floyd Murdoch, Monte Murdoch, Benton Basham, and Wally Sumner. Ringler estimated 100 Herring and 500 Ring-billed Gulls. We also saw about 10 Great Black-backed Gulls, 1 first-winter Glaucous Gull, and 2 first-winter Iceland Gulls.

On 11 February 1983, Paul Dumont lead a group to Alpha Ridge and estimated 4000-4500 gulls, with about 85% Ring-billed and 15% Herring Gulls, with 5-10 Great Black-backed Gulls and 1 Glaucous Gull.

Ringler's final trip of the winter was on 17 February 1983 with Hal Wierenga, Debbie Mignogno, Jon Dunn, Claudia Wilds, and Bill Clark. The tally was 500 Ring-billed, 300 Herring, 10 Great Black-backed, 1 first-winter Iceland, and 1 (probably third-winter) Lesser Black-backed Gulls.

With the advent of super-landfills, future trips to this and other inland landfills should yield interesting information on the winter distribution of the more common gulls in Maryland, as well as observations of the rarer species.

Maryland Birdlife 65(2):18

Leucistic Barn Swallow, *Hirundo rustica*

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†*Deceased; 6 December 1998*

[*Edited and published posthumously*]

On 4 July 1985, while working a breeding bird atlas block about 1 mi (1.6 km) south of the Maryland/Pennsylvania line on Pleasant Grove Road in Cecil County, Maryland, I observed a leucistic immature Barn Swallow (*Hirundo rustica*). The bird was perched on a dead snag with four immature and two adult Barn Swallows, and one Tree Swallow (*Tachycineta bicolor*), all normally plumaged.

The leucistic Barn Swallow had light tan upperparts from the crown through the tail, except for a cream-colored bar on the coverts between the scapulars and the secondaries. The underparts were cream-colored. The bill was horn-colored. I could not see the leg color. Only the eyes of the bird were dark.

Terres (1980) reported albino and leucistic Barn Swallows being chased by other Barn Swallows whenever they flew. There was no evidence of this behavior in the few moments that I saw the birds in flight. While perched, the leucistic bird made occasional begging movements toward one of the adult Barn Swallows. The adult did not feed the begging bird.

I watched the bird from 12:25 to 12:30 p.m. under excellent light conditions. The distance was approximately 50 ft (15 m). I was using a 10x50 Leitz binocular. I took field notes on the spot.

After five minutes, an unidentified high-pitched alarm note scattered the entire group of swallows. A few returned to the perch during the next ten minutes, but the leucistic bird was not seen again.

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Maryland Birdlife 65(2):19

Common Grackles (*Quiscalus quiscula*) Facilitate Opportunistic Feeding by American Robins (*Turdus migratorius*)

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†*Deceased: 19 August 2007*

[*Edited and published posthumously*]

I have previously reported on Common Grackles (*Quiscalus quiscula*) facilitating opportunistic feeding by Rusty Blackbirds (*Euphagus carolinus*) (Meanley 1972, 1991).

> Some years ago at Stuttgart, Arkansas, I observed Common Grackles feeding on acorns that had fallen to the ground. Rusty Blackbirds were on hand, in close proximity to the grackles. When the grackle had removed the acorn's husk, a Rusty would run up to the grackle causing it to drop the nut and "make a pass" at the Rusty. At this point, the more nimble Rusty would grab the dropped nut and make off with its loot (Meanley 1972).
>
> On 24 October 1991, I observed Common Grackles feeding on acorns in a willow oak (*Quercus phellos*) at the Jug Bay Wetlands Sanctuary in Anne Arundel County, Maryland. Beneath the tree, Rusty Blackbirds were feeding on the bits of acorn that had fallen to the ground due to the grackle feeding activity above (Meanley 1991).

Here I report observing Common Grackles feeding on American beech (*Fagus grandifolia*) nuts, at the Patuxent Wildlife Research Center, Laurel, Prince George's County, Maryland, and as fragments fell to the ground, American Robins (*Turdus migratorius*) were there to feed on them.

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Maryland Birdlife 65(2):20-23

2016 Spring Raptor Migration at Fort Smallwood Park, Anne Arundel County, Maryland

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The spring 2016 raptor migration was remarkable in many ways. Unfortunately, one of those ways was the unprecedented amount of adverse weather which in turn severely affected the count. From the start date of 20 February to the end date of 9 June, there were 33 days with at least some rain, 19 other days with winds having an unfavorable easterly component, and another 15 days with excessively strong winds that resulted in few migrants. With more than two full months of hawk-deterring weather, it shouldn't be a surprise that raptor numbers were significantly depressed. Counts for all but one of the most common raptor species were below average, with Red-shouldered Hawk down by a whopping 80% and American Kestrel down by 66% (Table 1). Also, all but three of these common species arrived later than their median arrival dates. The total number of raptors counted was just 7633 (Table 2), 23% below the five-year average (2011-2015) of 9942. As well, the 76 days and 370 hours of coverage were much lower than average (88 days and 487 hours), down by 14% and 24% respectively.

Table 1. 2016 Common Raptor Species. The 2016 count, 5-year percentage changes, and comparisons to the median arrival dates.

Species	2016 Count	5-Year % Change (2011-2015)	Median Arrival Date (E = earlier, L = later)
Black Vulture	302	-33%	L
Turkey Vulture	4617	-21%	L
Osprey	304	-30%	E
Bald Eagle	144	-6%	E
Northern Harrier	31	-59%	L
Sharp-shinned Hawk	1468	+17%	L
Cooper's Hawk	135	-59%	L
Red-Shouldered Hawk	47	-80%	L
Broad-winged Hawk	313	-40%	L
Red-tailed Hawk	110	-56%	L
American Kestrel	106	-66%	L
Merlin	34	-29%	E

Table 2. 2016 Monthly and Seasonal Count Summaries, Five-year Count Averages (2011-2015), and Ten-year Count Averages (2006-2015). (Due to the rounding off of the individual five-year and ten-year species averages, they do not necessarily add up to the total five-year and ten-year averages.)

Survey Days and Hours	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Total 2016	Five-year Average (2011-2015)	Ten-year Average (2006-2015)
Survey Days	5	22	24	21	4	76	88	89
Survey Hours	11.75	105.50	133.50	105.00	13.75	369.50	487	494
Species								
Black Vulture	25	153	97	27	0	302	450	406
Turkey Vulture	72	2731	1150	634	30	4617	5838	5654
Osprey	1	84	148	71	0	304	433	464
Swallow-tailed Kite	0	0	2	0	0	2	0	0
Mississippi Kite	0	0	0	5	0	5	12	8
Bald Eagle	2	23	46	72	1	144	154	128
Northern Harrier	0	1	14	16	0	31	76	95
Sharp-shinned Hawk	0	34	824	610	0	1468	1252	1692
Cooper's Hawk	0	26	77	32	0	135	329	399
Northern Goshawk	0	0	0	0	0	0	0	0
Red-Shouldered Hawk	4	37	6	0	0	47	233	202
Broad-winged Hawk	0	0	43	269	1	313	524	710
Swainson's Hawk	0	0	0	0	0	0	0	0
Red-tailed Hawk	4	56	31	19	0	110	253	250
Rough-legged Hawk	0	0	0	0	0	0	0	0
Golden Eagle	0	2	0	0	0	2	1	1
American Kestrel	0	23	71	12	0	106	308	319
Merlin	0	4	15	15	0	34	48	54
Peregrine Falcon	0	0	2	3	0	5	3	4
Unidentified Accipiter	0	0	0	2	0	2	8	13
Unidentified Buteo	0	1	2	0	0	3	7	11
Unidentified Eagle	0	0	0	0	0	0	1	0
Unidentified Falcon	0	0	2	1	0	3	2	4
Unidentified Raptor	0	0	0	0	0	0	9	15
Other	0	0	0	0	0	0	0	0
Total	**108**	**3175**	**2530**	**1788**	**32**	**7633**	**9942**	**10,427**

In addition, the total count for March was 20% below the 10-year average (2006-2015) of 3987, and the total count for April, normally the most productive month, was only 2530, 48% below the 10-year average of 4907.

However, all was not doom and gloom.

February's total count was above the 10-year average, and the first Osprey of the season was observed on the record-early date of 25 February, three days earlier than the previous record.

March stood out for two Golden Eagles (18 and 28 March, the first time ever for more than one Golden Eagle in a season).

April produced a similar record, but for a day rather than a season: two Swallow-tailed Kites flew by together on 26 April. The highest daily raptor count (750) for the season and the greatest daily variety of raptors (13) for the season also occurred on 26 April.

May was above average in total raptors counted, and it too had a record event. An astounding 41 Bald Eagles were tallied on 14 May, demolishing the previous daily record of 19. The season's 5 Mississippi Kites were also counted in May.

Other fauna besides raptors enhanced the hawk watch experience. An American Beaver family (Figure 1) has moved into the pond, possibly having arrived two years earlier, but much more noticeable this season. One or more Soras called from the pond edges multiple times over the season, though it's not clear if any nested. Finally, Ruddy Ducks (Figure 2) were especially abundant, with an estimated 5000 individuals counted one day from the Park shores and an estimated 9000 counted one day in rafts extending northward from the Park and around the peninsula.

The number of bird species observed at the Park has increased considerably due to data mined from past issues of *Maryland Birdlife* and from eBird. Two species came from *Maryland Birdlife*: Upland Sandpiper in 1981 and Lapland Longspur in 1980. Thirteen species came from eBird: Cackling Goose, 2008; Harlequin Duck, 2014; Ring-necked Pheasant, 1986; Hudsonian Godwit, 2012; Barred Owl, 2015; Eastern Whip-poor-will, 2012; Worm-eating Warbler, 2012; Connecticut Warbler, 2011; Mourning Warbler, 2012; Kentucky Warbler, 2012; Grasshopper Sparrow, 2010; Nelson's/Saltmarsh Sparrow, 2016; and Dickcissel, 2015. The total number of Park species is now 279.

The crew of regular observers came through again: compiler Sue Ricciardi, Hal Wierenga and Lynn Davidson, Ralph and Jane Geuder, Bob Rineer, Paul Fritz, Mary Jane McMillan, Andy Smith, Greg Smith, Dan Walker, Chris Reed, Steve Small, Carol Cwiklinski, Cal Orvis, Bill Hubick, John Hoffman, Linda Baker, Hugh Hoffman, Dan Haas, Steve Whitcomb, Harry and Liz Armistead, and Dan Eberly. Many other visitors also appreciably helped with the count, and the Park staff deserves sincere thanks for their continuing support of the hawk watch.

Another season is in the books. Numbers may have been diminished this year, but according to the cliché, "There's always next year!" On to Spring 2017!

Figure 1. American Beaver (*Castor canadensis*). Fort Smallwood Park, Anne Arundel County, Maryland; photographed by Dan Walker, 20 June 2016

Figure 2. Ruddy Ducks (*Oxyura jamaicensis*). Fort Smallwood Park, Anne Arundel County, Maryland; photographed by Dan Walker, 11 April 2016.

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2016 Maryland Mid-winter Bird Count

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The annual Maryland Mid-winter Bird Count was held on several weekend days between mid-January and early February 2016. Results were submitted for Frederick, Carroll, Howard, Baltimore, Harford, and Kent Counties, as well as the Fred J. Archibald Audubon Sanctuary and Audrey Carroll Audubon Sanctuary. No results were submitted for the Chesapeake & Ohio Canal.

The weather in January and February for the mid-Maryland area consisted of temperatures ranging from lows of 18-37 °F (-7.8 to 2.8 °C) overnight and highs of 40-52 °F (4.4-11.1 °C) during the day. Several locations had partially cloudy skies, scattered light fog, and occasional drizzle. Harford and Frederick counties reported areas of snow-covered ground.

Table 1. 2016 Maryland Mid-winter Count: participating counts, count codes, dates, and compilers. Counts are listed west to east.

Count	Count Code	Date	Compiler
Chesapeake & Ohio Canal	C&O	23 JAN 2016	Zach Slavin
Fred J. Archibald Audubon Sanctuary	FAAS	8 JAN 2016	David Smith
Audrey Carroll Audubon Sanctuary	ACAS	9 JAN 2016	David Smith
Frederick	FR	31 JAN 2016	David Smith
Carroll	CA	17 JAN 2016	Don Jewell
Howard	HO	6 FEB 2016	Joe Hanfman
Baltimore	BA	23 JAN 2016	Pete Webb
Harford	HA	9 JAN 2016	Rick Cheicante
Kent	KE	7 FEB 2016	Walter Ellison

A total of 151 field observers comprising 90 parties reported 117 species for a total of 131,883 birds. The observers spent 283.7 hours on foot covering 198.13 miles. Throughout the eight days, the observers also spent 169 hours traveling 1976 miles by car. Five groups spent over 10 hours owling and a total of 14.05 hours was spent feeder watching.

Table 2. 2016 Maryland Mid-winter Count: summary. (No results were submitted for C&O.)

	C&O	FAAS	ACAS	FR	CA	HO	BA	HA	KE
Total Species		42	41	82	76	87	88	74	81
Total Birds		726	434	23,160	16,238	24,812	9764	4643	52,106
Start Time		0600			0645	0535	0745		0700
Stop Time		1245			2100	1145	1645		1800
Parties		1	1	12	11	46	11	6	2
Number of People		2	4	31	19	61	20	8	6
Hours Driving				71.28	28	49.9		11.5	8
Miles Driving				839	379.1	527.6	31	107.7	92
Hours Walking		5.5	6.75	26	40.85	140.9	22.7	32.5	8.5
Miles Walking			2	12.28	29.5	124.2	16.4	5.75	8
Hours Owling			0.5	2.5	1.5	3.8		1.75	
Miles Owling				37		8.7			
Feeder Hours				1	6.75	3.8	0.25	2.25	
Hours Stationary					0.5 (hawking)	4.7			

As expected at this time of year, 24 species of waterfowl were observed with the largest number by far being Canada Geese at 32,942 followed by Snow Geese at 12,417. Also recorded were 3834 Ruddy Ducks and 486 Tundra Swans. Three Cackling Geese and 1 Red-throated Loon were spotted in the Back River Peninsula area of Baltimore County.

Six species of gulls were observed with the most notable being 54 Bonaparte's Gulls, 1 Iceland Gull, and 3 Lesser Black-backed Gulls (2 at the Eastern Sanitary Landfill, a gull magnet located in Baltimore County, and 1 in Kent County).

In Frederick County, the 2.5 hours and 37 miles of owling produced 7 Eastern Screech-Owls, 6 Great Horned Owls and 2 Barred Owls. Howard County produced 2 Eastern Screech-Owls, 10 Great Horned Owls, and 6 Barred Owls. Six counts recorded all seven woodpecker species. Frederick County recorded a first for their mid-winter count when a Loggerhead Shrike was observed.

Several counties had single bird sightings of several species including a Virginia Rail in Baltimore County and a Short-eared Owl in Carroll County. A Black-capped Chickadee was recorded in Frederick County, while a Northern Saw-whet Owl, a Boat-tailed Grackle, and an Evening Grosbeak were recorded in Howard County.

Table 3. 2016 Maryland Mid-winter Count: observed species. (No results were submitted for C&O.)

Species	C&O	FAAS	ACAS	FR	CA	HO	BA	HA	KE
Snow Goose				1				4	12,412
Cackling Goose						1	3		
Canada Goose		4	65	3068	2758	7021	1005	1086	17,935
Mute Swan				1					
Tundra Swan				22	2			69	393
Wood Duck									2
Gadwall					61		39		28
American Wigeon					1	3	6		
American Black Duck				182	26	12	13	113	30
Mallard		3		853	170	305	163	34	189
Northern Shoveler				1			82		6
Northern Pintail						2			33
Green-winged Teal				2	4				
Canvasback				1	2	1	100		
Redhead							2		
Ring-necked Duck				12	246	69	18	3	63
Greater Scaup									1
Lesser Scaup				2			112		71
scaup sp.									3000
Bufflehead				2	26	7	163		237
Common Goldeneye				12				20	205
Hooded Merganser					27	32	15	23	7
Common Merganser				40	45	148	44	61	243
Red-breasted Merganser							26	3	13
Ruddy Duck					31	3	3741		59
Wild Turkey		2	3	29	35	32		23	
Red-throated Loon							1		
Common Loon					2		1		1
Pied-billed Grebe					12		3		2
Double-crested Cormorant						1	35		
Great Blue Heron				9	6	9	5	14	21
Black Vulture				136	78	229	48	22	37
Turkey Vulture				236	311	248	40	38	186
Bald Eagle				5	20	28	8	31	39
Northern Harrier				6	1		6	10	4
Sharp-shinned Hawk		1		4		4		3	2
Cooper's Hawk				19	10	15	3	2	1
Red-shouldered Hawk				37	12	84	9	11	5
Red-tailed Hawk		1	1	107	56	56	11	11	16
buteo sp.						1			
Virginia Rail							1		
American Coot					11	1	16		
Killdeer				9		2	2		

Species	C&O	FAAS	ACAS	FR	CA	HO	BA	HA	KE
Wilson's Snipe				4		8	1		
American Woodcock					1	5			
Bonaparte's Gull							54		
Ring-billed Gull				11	147	286	1358	61	613
Herring Gull							353	18	190
Iceland Gull							1		
Lesser Black-backed Gull							2		1
Great Black-backed Gull							62		24
gull sp.				2		23	23		
Rock Pigeon				699	342	116	152	22	
Mourning Dove	2		3	541	335	390	30	77	85
Eastern Screech-Owl				7	1	2			
Great Horned Owl			1	6	1	10		3	2
Barred Owl	1		1	2	1	6		1	5
Short-eared Owl					1				
Northern Saw-whet Owl						1			
Belted Kingfisher			1	18	10	5	1	1	1
Red-headed Woodpecker	1			3	3	2	2	1	
Red-bellied Woodpecker	14		12	185	91	220	23	31	33
Yellow-bellied Sapsucker	4		3	34	11	21	2	12	1
Downy Woodpecker	19		9	143	60	168	24	25	26
Hairy Woodpecker	4		4	21	22	29	1	8	3
Northern Flicker	10		7	114	30	94	8	22	36
Pileated Woodpecker	4		2	47	13	40	5	13	2
American Kestrel				26	9	8	1	1	2
Merlin						1			1
Loggerhead Shrike				1					
Blue Jay	24		5	298	95	470	66	80	111
American Crow	8		22	646	1043	958	54	80	32
Fish Crow				39	34	183	65	2	
crow sp.				151		805	26		
Common Raven	1			8	3	1	3		
Horned Lark				579	51	74	4	3	15
Carolina Chickadee	54		14	410	219	421	50	79	51
Black-capped Chickadee				1					
Tufted Titmouse	47		11	278	133	421	51	35	33
White-breasted Nuthatch	20		5	137	91	178	39	24	4
Brown-headed Nuthatch									4
Brown Creeper	2		1	10	8	3			2
Winter Wren			2	4	3	6	4	1	
Carolina Wren	14		13	234	95	220	27	22	38
Golden-crowned Kinglet	4		3	19	11	22		3	13
Ruby-crowned Kinglet			1	4		1		1	5
Eastern Bluebird	19		2	210	145	360	10	14	24
Hermit Thrush	1			4	10		2	9	2
American Robin	90		3	2088	1183		123	285	962
Gray Catbird					2				1

Species	C&O	FAAS	ACAS	FR	CA	HO	BA	HA	KE
Brown Thrasher						1		1	5
Northern Mockingbird	11		6	175	55	121	25	23	25
European Starling	31		7	5305	2126	2325	370	357	1131
American Pipit			1	2			10		
Cedar Waxwing	85		22	89	67	21			277
Pine Warbler								1	
Yellow-rumped Warbler				37			24	13	51
Eastern Towhee			3	17	24	32	5	25	65
American Tree Sparrow	3		1	3	2	6	6	12	
Chipping Sparrow	6					6	2	9	
Field Sparrow	6		4	21	3	56	3	4	27
Savannah Sparrow				53		300	1	15	
Fox Sparrow				4	6	9	9	4	3
Song Sparrow	12		19	360	95	313	43	83	134
Swamp Sparrow	1		2	2	2	10	4	3	9
White-throated Sparrow	34		81	1404	485	959	246	433	840
White-crowned Sparrow				45		30	3	8	7
Dark-eyed Junco	54		20	1491	500	1195	157	289	311
Northern Cardinal	42		21	733	206	693	109	105	132
Red-winged Blackbird	65		1	155	80	1114	228	270	1032
Eastern Meadowlark				14		1	1	16	
Rusty Blackbird							4	5	
Common Grackle					4001	134	39	215	10,273
Brown-headed Cowbird				60	4	211		129	71
Baltimore Oriole						1			
blackbird sp.				300		8			
House Finch	14		11	308	98	371	24	27	25
Purple Finch			2	2		3	2	1	
Pine Siskin				3		33		1	
American Goldfinch	7		39	134	114	259	17	45	29
Evening Grosbeak						1			
House Sparrow	1			690	213	258	79	36	65

This has been my first experience with gathering and compiling the Mid-winter count data. I hope the readers will find the information interesting and informative. Thank you to all the observers and compilers for their time and effort. I look forward to next year's count. – Mary Anne.

Editor's Note: The Audubon Society of the District of Columbia (DC Audubon Society) ran the Chesapeake and Ohio Canal Mid-winter Count annually through 2016, but will be focusing on activities within the DC boundaries henceforth. If an individual or group is interested in organizing future C & O Canal Mid-Winter Counts, the DC Audubon Society would be happy to share historical information on organizing and running the count. The DC Audubon Society can be reached at dcaudubonsociety@gmail.com.

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Maryland Christmas Counts (116th CBC) December 2015 through January 2016

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Low temperatures averaged 33.8 °F (1.0 °C) across all Maryland counts (n = 24), and highs averaged 49.3 °F (9.6 °C). There was a minimum low of 19 °F (-7.2 °C) at Oakland, a maximum low of 56 °F (13.3 °C) at Point Lookout, a minimum high of 26 °F (-3.3 °C) at Oakland, and a maximum high of 73 °F (22.8 °C) at Point Lookout. The only winter precipitation noted was a light snow at Oakland with a maximum of 1 inch (2.5 cm) on the ground. Some compilers noted warmer temperatures at many counts and this could have contributed to slower birding, but also could have been partly responsible for sightings of some unusual birds.

Count names, abbreviated codes, survey dates, and compilers (including co-compilers) are presented in Table 1. Additional effort data (field counters, numbers of parties, party hours and miles, feeder counters and hours, and night hours and miles) are also tabulated (Table 2). The count with the most field counters was Seneca with 111 and the count with the fewest was Allegany County with 10. Seneca also had the most party hours (305.7), but fewer party miles (469.44) than Bowie (603.15), Annapolis-Gibson Island (596), Sugarloaf Mountain (582.5), Chesterville (567.05), Ocean City (523.6), and Rock Run (493.6).

Mega-highlights were a **Lazuli Bunting** (Figure 1) at Ocean City and a **Vermillion Flycatcher** (Figure 2) at Chesterville. There were also a few unusual wintering warblers. Seneca reported two **Chestnut-sided Warblers** and even four **Golden-winged Warblers**. Both species were well described and a single **Chestnut-sided Warbler** was photo-documented in subsequent searches for these birds. Crisfield had a **Nashville Warbler**. Ocean City had a **White-eyed Vireo** and a **Yellow-breasted Chat**. There were also a **Barrow's Goldeneye** and an **Eared Grebe** on the Point Lookout count. Chesterville had a **Loggerhead Shrike**. Middle River had a **Blue-gray Gnatcatcher**. Six Maryland counts had **Baltimore Orioles** (Bowie, Annapolis-Gibson Island, Middle River, Jug Bay, Lower Kent County, and Ocean City).

The inland counts are summarized in Table 3; the tidewater counts, in Table 4.

Table 1. 2015-2016 Maryland Christmas Bird Counts: abbreviations, survey dates, and compilers.

Christmas Bird Count	Abbreviation	Survey Date	Compiler
Allegany County	MDAC	19 DEC 2015	J.B. Churchill
Annapolis-Gibson Island	MDAG	03 JAN 2016	Hal Wierenga Lynn Davidson Sue Ricciardi
Bowie	MDBO	01 JAN 2016	David Mozurkewich
Catoctin Mountain	MDCM	20 DEC 2015	Mike Welch
Chesterville	MDCV	27 DEC 2015	Maren Gimpel
Crisfield	MDCR	27 DEC 2015	Paul Bystrak
Denton	MDDE	19 DEC 2015	Steve Westre
Elkton	MDEL	20 DEC 2015	Russell Kovach Laura Balascio
Jug Bay	MDJB	20 DEC 2015	Sam Droege
Lower Kent County	MDLK	20 DEC 2015	Nancy Martin Walter Ellison
Middle River	MDMR	19 DEC 2015	Pete Webb Kevin Graff
Oakland	MDOA	29 DEC 2015	Connie Skipper
Ocean City	MDOC	28 DEC 2015	Mark Hoffman
Patuxent River	MDPR	03 JAN 2016	Andy Brown
Point Lookout	MDPL	27 DEC 2015	Bob Boxwell
Port Tobacco	MDPT	20 DEC 2015	Gwen Brewer
Rock Run	MDRR	27 DEC 2015	Rick Cheicante Suzanne Procell
St. Michaels	MDST	20 DEC 2015	Wayne Bell
Salisbury	MDSA	20 DEC 2015	Mike Walsh
Seneca	MDSE	20 DEC 2015	Jim Nelson
Southern Dorchester County	MDSD	26 DEC 2015	Bruce Peterjohn Chan Robbins
Sugarloaf Mountain	MDSM	03 JAN 2016	Janet Millenson
Triadelphia Reservoir	MDTR	19 DEC 2015	David Holmes
Washington County	MDWC	19 DEC 2015	Mark Abdy

Table 2. 2015-2016 Maryland Christmas Bird Counts: summary.

Christmas Bird Count	Field Counters	Max Parties	Party Hours	Party Miles	Feeder Counters	Feeder Hours	Night Hours	Night Miles
Allegany County	10	9	50	139.3			1	2
Annapolis-Gibson Island	83	43	249	596	3	8	11	30
Bowie	85	44	261.6	603.15	5	8.5	19.3	67
Catoctin Mountain	13	6	49	343			1	
Chesterville	21	12	108.75	567.05			15.5	103.6
Crisfield	21	12	74.25	266.95			7.4	4.7
Denton	18	9	75.1	419.5			7.25	70.5
Elkton	17	10	61.5	260.28	1	6	4.3	20.95
Jug Bay	46	27	154.7	361.6	1	2	4.45	7.5
Lower Kent County	29	12	108	404.1	3	7.5	7.5	54.5
Middle River	49	24	96	265			1	2
Oakland	18	9	58.75	362.25	2	4	2.25	34.5
Ocean City	52	26	194.9	523.6			9.7	
Patuxent River	33	15	93.75	362.25	1	3.5	5.5	28.5
Point Lookout	21	8	46.75	260.8			3.2	7
Port Tobacco	16	9	64.6	267.5			3.5	11.5
Rock Run	45	14	116.4	493.6				
St. Michaels	35	17	99	396.5	6	8	14	89
Salisbury	32	12	106	482	1	0.5	11	72
Seneca	111	46	305.7	469.44	8	13.5	2	8.9
Southern Dorchester County	22	11	94	276.25			6.75	21
Sugarloaf Mountain	75	31	168.25	582.5	1	2.5	10.75	59
Triadelphia Reservoir	75	33	152	357.3	6	4	6	10
Washington County	21	14	108.5	547	3		1	

Figure 1. Lazuli Bunting, male, basic plumage (probable first-winter). First Worcester County record, third accepted state record. Found by Kevin Graff, Bob Ringler, and Jeff Shenot on the Ocean City Christmas Bird Count, 28 December 2015 (photographed by Jeff Shenot).

Figure 2. Vermilion Flycatcher, female. First Kent County record, fourth accepted state record. Found by Jim and Trish Gruber and Amanda Spears on the Chesterville Christmas Bird Count, 27 December 2015 (distant digiscope by Dan Small on 27 December 2015).

Table 3. 2015-2016 Maryland Christmas Bird Counts: inland counts.
(bolded species name = unusual for the count; bolded data value = high count record; cw = observed during count week)

Species	Oakland	Allegany County	Washington County	Catoctin Mountain	Sugarloaf Mountain	Seneca	Triadelphia Reservoir	Rock Run	Bowie	Elkton	Chesterville
Greater White-fronted Goose	1										
Snow Goose								23		3	1,129
Ross's Goose											
Brant											
Cackling Goose	1					4		8			6
Canada Goose	1,326	427	962	406	3,831	1,864	2,805	8,851	8,648	1,568	13,455
Greater White-fronted Goose x Canada Goose (hybrid)											1
Mute Swan	1							1			1
Trumpeter Swan									2		
Tundra Swan	3				24	1		10		1,437	309
Wood Duck		2	6	2					**110**		3
Gadwall	49				18	4	13	2	**51**	6	59
Eurasian Wigeon											
American Wigeon	1					32			2	20	4
American Black Duck	20		3	11	20	58	24	50	57	31	321
Mallard	1,207	207	501	85	141	625	129	738	448	455	1,415
American Black Duck x Mallard (hybrid)		2									
Blue-winged Teal											
Northern Shoveler	1								6	8	1
Northern Pintail	3					30					13
Green-winged Teal	16	5	1			11			20	6	33
Canvasback	6							4			1
Redhead	139				3	1					
Ring-necked Duck	315				39	94	80	3	283	25	106
Greater Scaup								2			
Lesser Scaup	33				2			14	2	10	39
Greater/Lesser Scaup						2					
Common Eider											
Harlequin Duck											
Surf Scoter											
White-winged Scoter											
Black Scoter											
scoter sp.											
Long-tailed Duck											
Bufflehead	**174**	14	3		28	235	4	22	3	24	
Common Goldeneye								5			
Barrow's Goldeneye											

Species	Oakland	Allegany County	Washington County	Catoctin Mountain	Sugarloaf Mountain	Seneca	Triadelphia Reservoir	Rock Run	Bowie	Elkton	Chesterville
Hooded Merganser	153	16	**14**		31	72	33	13	110	10	26
Common Merganser	11	36	12			13	45	8		12	4
Red-breasted Merganser	4							6			
Ruddy Duck	189							300	4	128	
duck sp.						4					
Northern Bobwhite											36
Ring-necked Pheasant			1								
Wild Turkey	28		41	23	4	9	5		2	2	3
Red-throated Loon											
Common Loon	5					4					
loon sp.											
Pied-billed Grebe	4	1		1	5	10		7	15	5	6
Horned Grebe	10							1			
Eared Grebe											
Northern Gannet											
Double-crested Cormorant	**2**					1		64	1	50	71
Great Cormorant											
cormorant sp.											
American White Pelican											
Brown Pelican											
American Bittern											
Great Blue Heron			7	13	18	41	11	146	17	41	59
Great Egret					1						1
Black-crowned Night-Heron								2			
Black Vulture		9	36	30	241	441	141	892	**375**	144	204
Turkey Vulture	**2**	2	135	67	305	364	200	288	323	307	695
vulture sp.						12					
Osprey											
Bald Eagle	7	5	**9**	4	11	13	31	187	**45**	52	81
Northern Harrier		1	1	6	2	5	3	2	2	3	16
Sharp-shinned Hawk		1	2	1	2	7	8	8	11	3	20
Cooper's Hawk	1	5	2	3	8	12	**15**	6	7	2	10
Accipiter sp.						1			2		1
Red-shouldered Hawk	2	1	7	11	67	53	36	14	44	8	7
Red-tailed Hawk	20	11	44	56	71	50	35	20	69	25	48
Rough-legged Hawk						1					
Buteo sp.											
Golden Eagle											
King Rail									1		
Clapper Rail											
Virginia Rail								2			
Rallus sp.											
Sora								1			
Common Gallinule											
American Coot	111				1	36		223	21		

Species	Oakland	Allegany County	Washington County	Catoctin Mountain	Sugarloaf Mountain	Seneca	Triadelphia Reservoir	Rock Run	Bowie	Elkton	Chesterville
Sandhill Crane	cw								1		
American Oystercatcher											
Black-bellied Plover											
Killdeer	10	19	6	26	1	1		26	20	3	173
Greater Yellowlegs											
Lesser Yellowlegs											
Greater/Lesser Yellowlegs											
Ruddy Turnstone											
Sanderling											
Dunlin											
Purple Sandpiper											
Least Sandpiper											
peep sp.											
Long-billed Dowitcher											
Wilson's Snipe	1						1				
American Woodcock								2	4	1	5
Bonaparte's Gull	cw						1	7		2	2
Laughing Gull											
Ring-billed Gull	3					810	197	13,041	1,119	1,336	215
Herring Gull						1	4	971	217	75	6
Thayer's Gull										cw	
Iceland Gull								2		cw	
Lesser Black-backed Gull								1			
Great Black-backed Gull								257		25	2
gull sp.					1	196		450	51		
Forster's Tern											
tern sp.											
Black Skimmer											
Rock Pigeon	11	245	569	294	407	569	345	486	1,314	13	331
Mourning Dove	33	26	61	108	415	252	399	181	518	43	262
Barn Owl					1						1
Eastern Screech-Owl	1	2	1	3	3	1	3	5	1	7	26
Great Horned Owl			3	2	4	2	2	5	7	4	27
Barred Owl	1			4	7	12	4	2	11	1	9
Long-eared Owl								1			
Short-eared Owl							2				
owl sp.						1					
Ruby-throated Hummingbird											
Belted Kingfisher	2	1	5	5	14	16	8	16	20	4	8
Red-headed Woodpecker				5	6	57		2	**19**	3	
Red-bellied Woodpecker	11	41	91	106	220	398	217	127	339	83	165
Yellow-bellied Sapsucker		5	9	18	55	123	34	32	55	19	32
Downy Woodpecker	26	44	53	63	180	402	146	123	216	70	85
Hairy Woodpecker	16	8	7	12	31	56	19	26	44	14	22

Species	Oakland	Allegany County	Washington County	Catoctin Mountain	Sugarloaf Mountain	Seneca	Triadelphia Reservoir	Rock Run	Bowie	Elkton	Chesterville
Northern Flicker (Yellow-shafted)	1	14	16	44	109	254	85	120	207	58	152
Pileated Woodpecker	4	30	20	17	51	104	44	31	79	13	12
American Kestrel	4		6	16	8	6	3		5	3	8
Merlin					1			1	**3**	2	
Peregrine Falcon	cw						1		1	**2**	
Eastern Phoebe		2			2	1	2	2			
Vermilion Flycatcher											1
Loggerhead Shrike											1
White-eyed Vireo											
Blue Jay	20	10	53	118	249	519	339	387	586	215	291
American Crow	1,445	135	343	172	996	1,949	1,076	446	3,639	578	106
Fish Crow			2		195	1,420	278	8	575	166	
crow sp.					661	1,664	1,423	6	906		
Common Raven	27	9	5	22	12	6	3		**4**		
Horned Lark	30		1	175	82	11		1		7	497
Tree Swallow											
Carolina Chickadee			307	177	551	788	329	432	594	206	281
Black-capped Chickadee	107	66									
Tufted Titmouse	36	63	107	114	316	461	253	231	366	116	143
Red-breasted Nuthatch	2					2				1	2
White-breasted Nuthatch	30	53	68	81	204	353	152	94	189	34	29
Brown-headed Nuthatch											
Brown Creeper	4	3	10	11	22	50	7	19	25	12	23
House Wren						1					1
Winter Wren		8	1	6	15	52	6	18	47	3	19
Sedge Wren											
Marsh Wren											
Carolina Wren	5		103	100	249	339	136	196	310	82	171
Blue-gray Gnatcatcher											
Golden-crowned Kinglet	6	10	12	16	27	126	20	80	44	16	20
Ruby-crowned Kinglet				6	8	92	6	35	34	8	25
kinglet sp.					2	2					
Eastern Bluebird	7	91	152	116	284	333	319	210	174	144	127
Swainson's Thrush											
Hermit Thrush		5		4	6	17	36	29	60	33	27
American Robin	3	64	233	495	1,727	1,469	7,747	**893**	3,305	483	1,051
Gray Catbird			1	1	3	1	2	2	3	1	4
Brown Thrasher					1			3	7	1	7
Northern Mockingbird		12	61	75	121	68	100	94	134	63	72
European Starling	388	902	2,694	3,449	1,393	2,342	6,117	3,726	4,759	826	4,327
American Pipit				123	7			19			80
Cedar Waxwing		22	226	215	460	953	703	318	416	62	433
Lapland Longspur											
Golden-winged Warbler						4					

Species	Oakland	Allegany County	Washington County	Catoctin Mountain	Sugarloaf Mountain	Seneca	Triadelphia Reservoir	Rock Run	Bowie	Elkton	Chesterville
Orange-crowned Warbler											
Nashville Warbler											
Common Yellowthroat											
Chestnut-sided Warbler						2					
Palm Warbler											
Palm Warbler (Western)											
Palm Warbler (Yellow)											
Pine Warbler										1	2
Yellow-rumped Warbler (Myrtle)		8	38	17	32	240	80	30	79	100	148
Yellow-breasted Chat											
Eastern Towhee		2		4	18	46	60	70	173	43	129
American Tree Sparrow	22	30		10	15	5		2	4	3	
Chipping Sparrow		10	5		7	11	5		11	2	
Field Sparrow		16	5	9	55	33	70	52	65	23	107
Savannah Sparrow (Savannah)				11	13	5	8	33	20	6	**116**
Savannah Sparrow (Ipswich)											
Nelson's Sparrow											
Saltmarsh Sparrow											
Fox Sparrow		1		5	9	28	29	14	45	13	15
Song Sparrow	15	95	56	115	367	346	327	451	449	152	782
Lincoln's Sparrow						1					1
Swamp Sparrow	3	3		5	14	51	34	57	87	15	54
White-throated Sparrow	2	221	182	262	727	1,357	1,203	1,362	2,238	698	2,279
White-crowned Sparrow		1	27	35	75	2	22		7	2	141
Dark-eyed Junco (Slate-colored)	166	201	453	630	998	1,291	1,021	860	1,715	763	1,290
sparrow sp.					11	10					
Northern Cardinal	26	131	239	221	466	621	441	447	577	238	442
Lazuli Bunting											
Red-winged Blackbird	3			380	435	507	144	9,735	1,726	10,149	20,458
Eastern Meadowlark					1						4
Rusty Blackbird	17								26		12
Common Grackle					9	200	74	5,328	30,984	15,210	64,419
Boat-tailed Grackle											
Brown-headed Cowbird				300	55	47	21	438	2,270	1,585	112
Baltimore Oriole									**3**		
blackbird sp.						52	40	1,900	300		
House Finch	24	12	46	98	145	244	186	233	207	128	92
Purple Finch				1	8	3	5	2	2		11
Pine Siskin	34				1			1	52		
American Goldfinch	16	74	135	80	304	360	235	203	297	76	119
House Sparrow	49	50	116	138	183	90	246	252	398	178	243

Table 4. 2015-2016 Maryland Christmas Bird Counts: tidewater counts. (bolded species name = unusual for the count; bolded data value = high count record; cw = observed during count week)

Species	Annapolis-Gibson Island	Middle River	Patuxent River	Jug Bay	Port Tobacco	Point Lookout	Lower Kent County	Denton	St. Michaels	Southern Dorchester County	Crisfield	Salisbury	Ocean City
Greater White-fronted Goose													
Snow Goose	3	1		1			271	309	11	918	60	27	3,696
Ross's Goose										1			1
Brant													2,291
Cackling Goose							19	1		1		1	6
Canada Goose	4,105	1,492	3,216	5,794	1,912	1,534	25,470	2,216	12,547	5,028	589	3,159	5,910
Greater White-fronted Goose x Canada Goose (hybrid)													
Mute Swan			7	1		3							
Trumpeter Swan													
Tundra Swan	353	16	35	95	16	41	686	182	422	1,022	73	47	**1,238**
Wood Duck	4	2		19		1	18	4	1	25	5	2	31
Gadwall	10	243	50	124	38		924		11	4		2	406
Eurasian Wigeon													cw
American Wigeon	1	19		8			385		3	2			275
American Black Duck	42	13	17	517	18		666	36	60	349	78	69	986
Mallard	796	576	220	1,745	97		2,774	205	576	2,671	88	79	4,048
American Black Duck x Mallard (hybrid)							2						1
Blue-winged Teal								2					
Northern Shoveler		101		38			122	2		33			83
Northern Pintail	1	1		54			650	2	6	1,042	8		24
Green-winged Teal		1		108			**367**			154		15	1,734
Canvasback	57		1				7,020		112	1,725	2		43
Redhead	3			1			1,031						5
Ring-necked Duck	32	36	7	141	5		582	48		25			269
Greater Scaup	204						21,260			35			
Lesser Scaup	2	2			17	6	79,236			2			2
Greater/Lesser Scaup	50						5,000		18				
Common Eider													2
Harlequin Duck													3
Surf Scoter	908			1		13	10		46	9	42		512
White-winged Scoter							1						6
Black Scoter	3		1			2	3				2		226

Species	Annapolis-Gibson Island	Middle River	Patuxent River	Jug Bay	Port Tobacco	Point Lookout	Lower Kent County	Denton	St. Michaels	Southern Dorchester County	Crisfield	Salisbury	Ocean City
scoter sp.	108					40			100				2,762
Long-tailed Duck	18		14	5		173	9	1	316		15		28
Bufflehead	2,528	64	966	682	162	746	2,212	17	679	431	275	43	1,796
Common Goldeneye	107		94			89	296		152	15			2
Barrow's Goldeneye						1							
Hooded Merganser	90	65	43		22	4	34	5	**26**	32	5	12	281
Common Merganser		4		8		12				5	1		
Red-breasted Merganser	5	2	8			7	22		6		4	6	110
Ruddy Duck	3,183	112	2,931	5	289	**13,596**	9,224		11	1,088	29	5	334
duck sp.													
Northern Bobwhite								3			2	6	
Ring-necked Pheasant							2						
Wild Turkey	5		3	1		1	5	26	13	1	40	30	1
Red-throated Loon	43	1					9			**8**	2	4	210
Common Loon	10	3	62	5		49	22		52	3	5	**11**	133
loon sp.													35
Pied-billed Grebe	8	26	1	11	2	3	5	6		1		1	18
Horned Grebe	14	17	151			95	6		28	3	3		67
Eared Grebe						1							
Northern Gannet	1		15			98			4	1	29		38
Double-crested Cormorant	1,490	157	58	153	257	41	91	7	**154**	19	10	116	96
Great Cormorant	2					4	**5**						
cormorant sp.									4				
American White Pelican										50			16
Brown Pelican	4		129			54							
American Bittern										1	1		
Great Blue Heron	113	43	25	52	16	23	78	14	28	41	51	15	87
Great Egret													
Black-crowned Night-Heron						**3**					1		5
Black Vulture	193	221	163	526	120	19	81	251	168	142	93	26	234
Turkey Vulture	179	95	160	301	157	82	457	319	263	554	479	412	803
vulture sp.													
Osprey	3			1		1						1	
Northern Harrier	2	3	3	22	5	1	16	3	5	54	27	16	12
Sharp-shinned Hawk	17	4	1	5	4		19	1	9	7	4	5	10
Cooper's Hawk	7	6	2	3	2	2	7	3	4	1	5	5	9
Accipiter sp.		3			1							2	
Bald Eagle	56	58	62	**86**	65	26	195	67	65	129	73	64	121

Species	Annapolis-Gibson Island	Middle River	Patuxent River	Jug Bay	Port Tobacco	Point Lookout	Lower Kent County	Denton	St. Michaels	Southern Dorchester County	Crisfield	Salisbury	Ocean City
Red-shouldered Hawk	29	17	20	31	12	4	9	5	2	2	5	8	19
Red-tailed Hawk	42	24	13	32	12	7	47	19	35	18	23	25	29
Rough-legged Hawk													
Buteo sp.								1					
Golden Eagle										1			1
King Rail										1			
Clapper Rail				1						2	2		
Virginia Rail	3	1		5			8			18	27	5	1
Rallus sp.											20		
Sora				1									
Common Gallinule										1			
American Coot	20	14	4				81						15
Sandhill Crane													
American Oystercatcher													27
Black-bellied Plover													102
Killdeer	7			31	6	7	22	198	23	57	500	1	12
Greater Yellowlegs						1	1		**3**	43	37	1	38
Lesser Yellowlegs										11	2		
Greater/Lesser Yellowlegs							1				44		
Ruddy Turnstone													15
Sanderling													187
Dunlin									24	340	122		4,171
Purple Sandpiper													23
Least Sandpiper				2							11		
peep sp.													50
Long-billed Dowitcher										1	1		
Wilson's Snipe		1		4			1	5		9	11	1	46
American Woodcock			2	3		1	2	1	1	5	1		5
Bonaparte's Gull		180	1			143	4		1				4
Laughing Gull		379		3	2	**95**					1		1
Ring-billed Gull	1,954	4,030	1,069	2,492	990	522	1,390	872	1,607	7,809	4,860	2,174	5,430
Herring Gull	723	1,714	141	1,414	87	206	351	10	411	361	3,468	456	407
Thayer's Gull		1											
Iceland Gull													
Lesser Black-backed Gull	1	4					1						2
Great Black-backed Gull	372	212	97	176	4	131	60		110	29	119	50	193
gull sp.	61	30		201	337						518	45	
Forster's Tern				4		24		2	6				

Species	Annapolis-Gibson Island	Middle River	Patuxent River	Jug Bay	Port Tobacco	Point Lookout	Lower Kent County	Denton	St. Michaels	Southern Dorchester County	Crisfield	Salisbury	Ocean City
tern sp.										3			
Black Skimmer													2
Rock Pigeon	87	196	48	56	7	3	81	98	41	17	353	213	529
Mourning Dove	347	176	98	210	60	41	119	274	82	241	257	202	207
Barn Owl				4						3			
Eastern Screech-Owl	6		2	4	6	1	37	9	55	9	11	**46**	20
Great Horned Owl	3		8	14	6	10	39	17	26	10	21	24	8
Barred Owl		1	2	12		1	3	11	2	1		3	1
Long-eared Owl						1							
Short-eared Owl		1											
owl sp.													
Ruby-throated Hummingbird			1										1
Belted Kingfisher	22	8	13	12	11	11	13	4	12	9	22	16	14
Red-headed Woodpecker		3	2	26	18		2			2	2		
Red-bellied Woodpecker	264	67	74	179	63	37	147	35	46	21	24	42	42
Yellow-bellied Sapsucker	68	12	10	48	12	11	40	6	30	1	9	8	6
Downy Woodpecker	205	81	85	135	32	15	96	32	56	35	32	57	48
Hairy Woodpecker	28	16	14	30	12	2	19	2	13	6	14	12	12
Northern Flicker (Yellow-shafted)	113	55	49	129	41	9	118	61	101	49	84	54	78
Pileated Woodpecker	52	11	21	45	22	9	13	34	15	12	19	16	18
American Kestrel	1	1	7	1	1	1	5	7	1	8	7	10	13
Merlin		1	1				3	1	1		3	2	2
Peregrine Falcon	3					1					1		5
Eastern Phoebe							2	3	4	1		3	3
Vermilion Flycatcher													
Loggerhead Shrike													
White-eyed Vireo													1
Blue Jay	472	125	110	173	73	8	433	75	165	17	40	60	69
American Crow	570	296	360	**2,325**	229	41	223	360	310	86	479	780	491
Fish Crow	318	89	3	**350**	11	1	2	7		439	29	262	40
crow sp.	160	357	19	30		15				800	505	263	19
Common Raven													
Horned Lark			23	8		9	319	348	2	2	4		30
Tree Swallow										2			
Carolina Chickadee	602	182	232	304	94	160	241	123	226	101	154	219	247
Black-capped Chickadee													

Species	Annapolis-Gibson Island	Middle River	Patuxent River	Jug Bay	Port Tobacco	Point Lookout	Lower Kent County	Denton	St. Michaels	Southern Dorchester County	Crisfield	Salisbury	Ocean City
Tufted Titmouse	395	105	147	240	91	89	172	71	140	34	67	90	112
Red-breasted Nuthatch			3	1					1				
White-breasted Nuthatch	182	43	65	119	18	6	14	15	17	2	2	2	
Brown-headed Nuthatch			8			**133**	8		28	101	103	42	88
Brown Creeper	11	4	4	21	6	5	9	12	5	7	5	15	7
House Wren				1		1	2		1	3		2	1
Winter Wren	28	7	2	19	5		17	13	6	4	17	16	15
Sedge Wren											7	1	1
Marsh Wren	2			1		**3**	**9**			4	3	2	
Carolina Wren	359	75	95	189	46	68	101	55	67	49	133	88	165
Blue-gray Gnatcatcher		1											
Golden-crowned Kinglet	3	2	38	23	11	10	7	25	18	54	53	82	28
Ruby-crowned Kinglet	26	11	29	46	17	8	23	8	20	12	44	33	13
kinglet sp.													
Eastern Bluebird	167	46	63	224	42	50	144	104	336	94	140	124	170
Swainson's Thrush									1				
Hermit Thrush	92	21	14	116	17	2	36	22	25	11	47	40	16
American Robin	3,322	992	165	850	187	51	217	325	1,104	316	69	1,313	7,815
Gray Catbird	17	1	3	8	2	1	6	4	4	6	18	8	
Brown Thrasher	33	4	2	27	8	5	22		14	4	16	6	10
Northern Mockingbird	123	62	28	65	24	19	105	63	109	12	27	48	57
European Starling	2,266	3,199	330	11,016	462	765	2,635	1,791	1,290	880	2,386	1,114	14,534
American Pipit		1			45		12	11			1		
Cedar Waxwing	1,169	63	456	384	236	318	118	48	387	83	43	59	370
Lapland Longspur			15										
Golden-winged Warbler													
Orange-crowned Warbler							1						
Nashville Warbler											1		
Common Yellowthroat			2				1						1
Chestnut-sided Warbler													
Palm Warbler			1					3			5	2	
Palm Warbler (Western)													2
Palm Warbler (Yellow)													3
Pine Warbler		1			1	3	1		2		17	4	

Species	Annapolis-Gibson Island	Middle River	Patuxent River	Jug Bay	Port Tobacco	Point Lookout	Lower Kent County	Denton	St. Michaels	Southern Dorchester County	Crisfield	Salisbury	Ocean City
Yellow-rumped Warbler (Myrtle)	131	46	128	210	252	116	221	32	734	122	543	195	1,117
Yellow-breasted Chat													1
Eastern Towhee	106	37	23	159	21	8	96	13	22	3	21	37	32
American Tree Sparrow		1	1	1			2						
Chipping Sparrow	5		26	1	7	5	2	22	7	1	105	41	121
Field Sparrow	45	19	5	34	8	15	78	34	26	42	25	53	56
Savannah Sparrow (Savannah)		7	52	9	34	18	51	8	9	22	60	6	41
Savannah Sparrow (Ipswich)													8
Nelson's Sparrow											2		
Saltmarsh Sparrow											4		
Fox Sparrow	12	17	1	19	3	5	28		7	1	26	9	45
Song Sparrow	312	397	66	368	173	45	498	68	134	140	257	184	281
Lincoln's Sparrow													
Swamp Sparrow	50	194	7	82	16	16	89	4	18	85	162	49	60
White-throated Sparrow	1,557	863	442	1,946	376	219	1,542	707	607	96	299	594	976
White-crowned Sparrow	9	2			18		22	7	3				
Dark-eyed Junco (Slate-colored)	1,462	695	389	864	479	196	716	791	500	58	135	319	445
sparrow sp.													
Northern Cardinal	760	174	177	465	79	106	398	152	166	56	132	214	251
Lazuli Bunting													1
Red-winged Blackbird	996	1,703	143	33,439	576	535	7,421	822	1,380	14,466	1,189	2,150	2,782
Eastern Meadowlark			35		5	11	5	4		124	53	37	73
Rusty Blackbird	3	11		161							3	5	1
Common Grackle	1,193	342	5	**86,866**	70		684	310	28	2,049	7	51	51
Boat-tailed Grackle										135	89		
Brown-headed Cowbird	109	39	27	99	46	2	74	100	46	50	13	38	98
Baltimore Oriole	1	1		1			1						1
blackbird sp.	63	145		100,040									200
House Finch	214	122	57	104	8	9	69	38	115	1	19	18	106
Purple Finch	2	2		2			2		5			2	2
Pine Siskin	5					29			8			4	1
American Goldfinch	317	170	70	280	47	103	238	43	224	187	100	121	205
House Sparrow	245	200	42	156	2	3	182	76	65	8	48	10	179

Maryland Birdlife 65(2):44

Peer Reviewers – 2015 and 2016

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CONTENTS – FALL 2016

Editor's Note
Eugene J. Scarpulla 1
Peregrine Falcon (*Falco peregrinus*) Prey Items Found outside a State Office Building Complex in Baltimore, Maryland, August 1982 to March 1983
Robert F. Ringler 4
Waterbirds at Liberty Reservoir, 1985
Robert F. Ringler 10
Gull Concentrations at Alpha Ridge Landfill, Howard County, Maryland, Winter 1982-1983
Robert F. Ringler and Eirik A. T. Blom 14
Leucistic Barn Swallow, *Hirundo rustica*
Edward D. Fingerhood 18
Common Grackles (*Quiscalus quiscula*) Facilitate Opportunistic Feeding by American Robins (*Turdus migratorius*)
M. Brooke Meanley, Jr. 19
2016 Spring Raptor Migration at Fort Smallwood Park, Anne Arundel County, Maryland
Sue A. Ricciardi 20
2016 Maryland Mid-Winter Count
Mary Anne Fluke 24
Maryland Christmas Bird Counts (116th CBC) – December 2015 through January 2016
John B. (J.B.) Churchill 29
Peer Reviewers – 2015 and 2016
Mark S. Johnson 44